

Fire Protection Plan Santa Fe Heights

APNS 267-147-01 & 267-147-02

TM 5556, ER10-08-007

County of San Diego



July 1, 2011

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Santa Fe Heights Road Subdivision Project
Fire Protection Plan
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SANTA FE HEIGHTS SUBDIVISION PROJECT
Fire Protection Plan
Rancho Santa Fe Fire Protection District
County of San Diego
APNS 267-147-01 & 267-147-02
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Chapter 1 - INTRODUCTION

This Fire Protection Plan (FPP) has been prepared for Tract Map No. TM 5556, the Santa Fe Heights Subdivision Project located in the County of San Diego, California. The purpose of the FPP is to assess the potential impacts resulting from wildland fire hazards and to identify the measures necessary to mitigate those impacts. As part of the assessment, the plan has considered the property location, topography, geology, combustible vegetation (fuel types), climatic conditions, and fire history. The plan addresses water supply; access; structural ignitability and fire resistive building features; fire protection systems and equipment; impacts to existing emergency services; defensible space; and, vegetation management. The plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect one or more at-risk communities and essential infrastructures. The plan recommends measures that the property owner will take to reduce the probability of ignition to structures throughout the area addressed by the plan.

A FPP must be submitted to and approved by the Rancho Santa Fe Fire Protection District (RSFFPD) and the San Diego County's Department of Land Use and Planning (DPLU). The FPP documents shall comply with applicable fire regulations, including but not limited to the requirements of the Rancho Santa Fe Fire Protection District (e.g., Ordinance 2011-01, the International Urban-Wildland Interface Code, 2006 Edition, the 2009 County Consolidated Fire Code, Guidelines for Determining Significance and Report Format and Content Requirements (First Revision, December 19, 2008, County of San Diego Ordinance Numbers: 10013, the County Consolidated Fire Code-Chapter 47, the 2010 California Fire Code, and further supplemented by the criteria listed in the National Fire Protection Association 1144 – Standard for Protection of Life and Property from Wildfire (2008 Edition).

1.1 Project Location, Description and Environmental Setting

1.1.1 Project Location

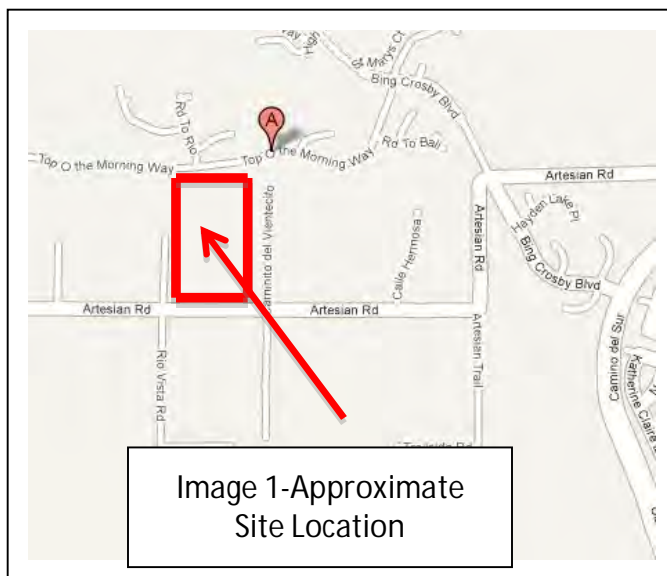
The Santa Fe Heights Subdivision Project is an 8-lot residential development on Tentative Map TM 5556. It is located north of Artesian Road and immediately west of Caminito del Vientecito, approximately .75 miles west of Camino del Sur in the central portion of Rancho Santa Fe Fire Protection District in the unincorporated area of San Diego County. Zoning for the site is rural residential with a 2-acre minimum size. Access to the lots will be via Calle Montana, a private paved road to the north of Artesian Road. Artesian Road is a publicly maintained road (See Vicinity Map).

1.1.2 Project Description

The project is the major subdivision of 19.05 net acres into 8 lots. The 8 proposed lots on Tract Map TM 5556 are between 2.03 and 2.8 acres in size. This FPP will evaluate the potential for construction of new single-family homes on each of the eight proposed lots, with the knowledge that these residences will be constructed at a future date.

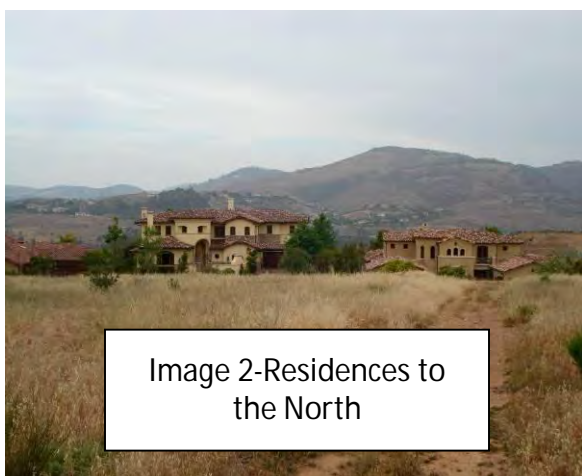
Easements associated with the proposed development include an existing 20-foot Olivenhain Municipal Water District water easement and an existing 7-foot Rancho Santa Fe Community Services District sewer easement along the east boundary of the parcel. A new 8-inch water main and new sewer main will be constructed to serve future residences within proposed private road Calle Montana.

Local access is via Artesian Road, which is a publicly maintained paved road +30 feet in width. From Artesian Road, the parcels will be accessed by Calle Montana, which is paved to a width of 24 feet graded to 40 feet per Rancho Santa Fe Fire Protection District standards. This private road leads to a 16-foot driveway for each residence.



1.1.3 Environmental Setting

The project site is located in unique habitat, topography, geology, flammable vegetation, and climate. The area to the east and south consists of non-native grassland interspersed with disturbed Diegan Coastal Sage Scrub. To the north is Top O' the Morning Way, featuring several developed parcels with single-family residences. Directly to the west there are both disturbed Coastal Sage Scrub and two developed parcels containing residences. To the north of the proposed development across Top O' the Morning Way are developed parcels featuring residences with irrigated landscaping, and to the south is the publicly maintained Artesian Road, also containing existing developed parcels.



1.1.3.1 Topography. The Santa Fe Heights Subdivision Project is located on a gently sloping landscape at the base of the coastal mountains, approximately 7.5 miles inland from the ocean. Its location is aligned with the more rugged terrain to the northeast, which supports and enhances the effects of severe northeast wind (Santa Ana) conditions. In its natural state, the native coastal sage scrub vegetation throughout this area and this terrain supports a very high fire hazard.

1.1.3.2 Vegetation. The native vegetation on this parcel and surrounding vegetation has been significantly disturbed with previous land activities/uses, including fuel modification and hazard abatement in recent years. At present, vegetation communities on-site are a mosaic of non-native grassland and Diegan Coastal Sage Scrub. Coastal Sage Scrub historically has dominated this area. At present, a variety of plant species located on- and off-site includes annual non-native grasses, anise, buckwheat, baccharis, lemonade berry, laurel sumac, and prickly pear cactus (SCAL 18 Fuel Model).



If this project site was to be left undeveloped and without any fire hazard abatement or other land use disturbance, Coastal Sage Scrub would again dominate this site. It would increase in fuel loading and become what would be classified as a typical Coastal Sage Scrub fuel model (SCAL 18 Fuel Model).



1.1.3.3 Elevation. The elevation of the project site ranges from 406 feet to 467 feet.

1.1.3.4 Climate. This project is in a transitional phase between coastal and interior weather regimes. The typical prevailing summer time wind pattern is out of the west/southwest and normally is a low velocity (5-10 MPH with occasional gusts to 20 MPH) and is associated with relative humidity readings ranging between 20% and occasionally more than 50% due to the site's proximity to onshore winds from the ocean.

However, the most critical weather pattern to this proposed residential development is a hot, dry offshore wind, typically called a Santa Ana. Such wind conditions are usually associated with strong (>40 MPH; gusting to 60 MPH), hot, dry winds with very low (<15%) relative humidity. Santa Ana winds originate over the dry desert land to the northeast and can occur anytime of the year; however, they generally occur in the late fall (September through November). This is also when non-irrigated vegetation is at its lowest moisture content.

1.1.3.5 Fire History. Historically during the summer months (June through September), there has been a pattern of small wildfires which burned in a north to northeast direction under prevailing west to southwest winds. The more serious fire events during these summer months occurred during "rare events" of hot dry prevailing winds of 30 miles per hour, especially when burning in the natural and native sage scrub fuels.

Similar events have occurred in this project area. In October of 2003, northeast winds fanned the Cedar Fire across 280,278 acres, burned 2820 buildings (including 2232 homes), and killed 15 people. The Witch Fire in October of 2007 burned 197,990 acres, killed two people, and burned 1200 homes and commercial properties. Fires like the Cedar and Witch Fires are examples of extreme wildland fire events in San Diego County. The FPP for this project shall require fuel modification, ignition-resistant construction, water supply and fire apparatus access, and other fire protection strategies for worst-case scenarios in similar wildfire events.

1.1.3.6 Public and Private Ownership of Land in the Vicinity. All land within the general vicinity of the property is privately owned.

1.1.3.7 Existing Land Uses on Site and on Surrounding Lands. The proposed development is vacant land with no history of other land uses. The site has been disturbed by annual weed abatement mowing over the past years. The Artesian Fire on June 30, 2010 burned approximately 1/3 of the parcel. The surrounding parcels on the north, south, east and west are developed with residential single-family residences in the same rural residential zoning (minimum 2 acre lots). There are increased community developments in the surrounding area, including major subdivisions in various stages of development to the north and east of the proposed subdivision.



Image 8-Aerial Photo of proposed development

Chapter 2. GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

This Fire Protection Plan evaluates the potential adverse environmental effects that the Santa Fe Heights Subdivision Development may have from wildland fire and proposes appropriate mitigations for any adverse impacts to ensure that this development does not unnecessarily expose people or structures to a significant risk of loss, injury or death in regard wildland fire. The following guidelines for the determination of significance are used:

1. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
2. Would the project result in inadequate emergency access?
3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically

altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance service ratios, response times or other performance objectives for fire protection?

4. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

With these guidelines, the determination of significance will focus on the modification of fuels, fire access, water supply and the use of ignition-resistant construction.

2.1 People and Structures Exposure to Fire

The FPP will evaluate this minor rural subdivision and its survivability in a worst case scenario of northeast wind conditions (Santa Ana) with gusts of 60 MPH during a wildland/wildfire event in the area. This evaluation will then be used to document fuel modification requirements in combination with ignition-resistant construction materials, and other fire protections systems for the protection of life and property within this proposed development.

2.2 Fire Access

Fire Code requires secondary access for dead-end road lengths exceeding 1320 feet for parcels zoned 1 to 4.99 acres. This FPP, then, will evaluate and document measures taken to address secondary fire access.

2.3 Water Supply

The Olivenhain Municipal Water District has agreed to serve water needs for this parcel. This FPP will evaluate this public water supply system and the supply requirement for residential structures set forth in the adopted edition of the U.F.C and U.B.C.

2.4 Ignition Resistant Construction and Fire Protection Systems

The survivability of these future residential units is dependent on the ignition-resistant construction materials for protection from wildfire heat conduction, convection, radiant heat, firebrands, and direct flame impingement to the site.

The FPP will document ignition-resistant construction requirements based on the proximity of wildland fuels and the exposure to both people and structures in this very high fire hazard zone.

Chapter 3 - ANALYSIS OF PROJECT EFFECTS

The future residences that are proposed to be constructed on this property are within a rural residential zone presently in the vicinity of urbanized areas where residences are intermixed with wildland fuels. The adjacent lots are developed which will significantly modify the fuel loading through their own fuel modification requirements. Following are potential adverse effects and mitigations to ensure that these adverse effects will not be a fire risk to life and property.

A Fire Protection Plan Map (FPPM) has been prepared and attached as Exhibit 1. The FPPM depicts the location of all proposed fuel modification treatments and mitigation measures for the Santa Fe Heights proposed development. Fuel modifications and planting of fire-resistive

landscaping are required to reduce the fire spread, intensity, and flame lengths, factors most important to the survivability of structures in fire prone environments.

There are no common areas in this residential development. The owner of each lot shall be responsible for maintaining the fire resistive landscaping, the removal of undesirable vegetation, and general upkeep of the property to provide a 'firewise' environment. This requirement shall be recorded in the CCR's and Deed restrictions.

3.1 Adequate Emergency Services

Fire Protection for the Santa Fe Heights Subdivision will be primarily by the 4S Ranch Fire Station No. 2, located at 16930 Four Gee Road, San Diego, CA 92127. This fire station would adequately meet the travel time and response time for the Rancho Santa Fe Fire Protection District, as determined by using NFPA 1142 Table C.11(b). Time-Distance Table Travel time is determined as the estimated time it takes for a responding fire station to reach the furthest structure in the development. Station #2 is 2.7 miles from the furthest structure on this development site and travel time would be approximately 5.75 minutes from Station 2. This travel time to the eight future residences includes pre-departure or "boot" time and meets the standard for this rural residential zone.

3.2 Primary and Secondary Fire Access

- 3.2.1** The primary access to these residential developments shall be via Artesian Road (established 30-foot public roadway) from Camino del Sur. Artesian Road is a +30-foot paved surface on a 60-foot graded surface within a 60-foot private road easement with an unobstructed vertical clearance of not less than 13 feet 6 inches. Access to the residences within the proposed subdivision shall be by way of Calle Montana, a private roadway to be constructed from Artesian Road and then by way of driveways leading off this private roadway. This access roadway and driveways shall meet the requirements of RSFFPD's Ordinance 2011-01.
- 3.2.2** The proposed Calle Montana private roadway connecting to Artesian Road shall have each lot properly numbered and shall be marked with no parking signs on both sides of the roadway. RSFFPD's Ordinance 2011-01 requires that the maximum length of a dead-end road, regardless of the number of parcels served shall be 1320 feet if the lots are zoned 1 acre to 4.99 acres. The eight residences shall be on lots of between 2.03 and 2.8 acres each. Since the distance from the intersection of Artesian Road and Camino del Sur and the project's proposed private access road exceeds 1320 feet, the project will require a secondary access from Caminito de las Palmas (private street west of the development) and Top O' Crosby Street (private) and then connecting to Top O' the Morning Way (private). Top O' the Morning Way exits on to Camino del Sur (multi lane street). The secondary access route has been approved by Cliff Hunter, Fire Marshal, Rancho Santa Fe Fire Protection District (see APPENDIX 'G').
- 3.2.3** RSFFPD's Ordinance 2011-01, Section 503.1 requires that a hose pull shall not be more than 150 feet from a fire apparatus to any portion of an exterior wall of the first story of a residence. This will be met by the proximity of the private roadway and the proximity of residences to the proposed turnarounds.
- 3.2.4** Driveways shall be constructed to provide the required minimum unobstructed width of 16 feet and a minimum obstructed height of 13 feet 6 inches.

- 3.2.5** The radius of the cul-de-sac at the end of Calle Montana is constructed with a 36-foot radius. No parking shall be allowed within the 36-foot radius of Calle Montana and shall be marked with No Parking signs.
- 3.2.6** Any gate or barrier across the secondary fire access roadway shall have specific plans reviewed and approved prior to installation by the Rancho Santa Fe Fire Protection District and County of San Diego DPLU Fire Marshal. All gates shall be equipped with an approved emergency agency key switch (Knox Box Key), which overrides all commands and opens the gate. All gates shall also be equipped with approved emergency vehicle strobe light detectors capable of detecting emergency vehicle pulsing strobe lights from any direction of vehicle approach. Gates shall automatically open using battery powered back-up in case of a power failure. Gates shall open by the Crosby security guard(s) remote switching device, as needed in an emergency (See 3.6.7).

The gradient for a fire apparatus access roadway shall not exceed twenty percent (20%). Grades exceeding fifteen percent (15%) shall not be permitted without mitigation. Minimal mitigation shall be a surface of Portland cement concrete with a deep broom finish perpendicular to the direction of travel or equivalent, to enhance traction. The angle of departure and angle of approach of a fire access roadway shall not exceed twelve degrees (12%) or as approved by the Fire Chief. There are no roadways proposed that would exceed this grade.

- 3.2.7** The roadways accessing the eight residences shall be paved, all-weather surfaces, which are capable of supporting fire apparatus weighing up to 75,000 pounds.
- 3.2.8** All streets shall be signed and marked according to the ordinances of Rancho Santa Fe prior to the beginning of construction.
- 3.2.9** The first layment of asphalt shall be completed prior to bringing combustible building products onto the development sites. Additionally, the first 50 feet of fuel modification shall be cleared around each lot as an interim firebreak between combustibles and existing vegetation.

3.3 Water Supply

The development will be connected to the Olivenhain Municipal Water District (See APPENDIX 'E' – Water Service Availability Form). Water supply shall meet the water supply requirements for single family units in accordance with California Fire Code Section 903, Chapter 7a of the California Building Code and the Rancho Santa Fe Fire Protection District's Ordinance 2011-01, Section 507.3. The requirements to further mitigate concerns are listed below:

- 3.3.1** Water supply shall meet the water supply requirements for residential structures set forth in the adopted edition of the California Fire Code and the California Building Code with a fire flow requirement that shall not be less than 2500 GPM at 20 pounds per square inch (psi) residual pressure.
- 3.3.2** Hydrants, mains and water pressures shall be designed to comply with Rancho Santa Fe Fire Protection District Code requirements. In this residential development of eight (8) lots, there will be fire hydrants located at intervals to meet the Fire Protection District's requirement of 500 feet to reach all portions of all proposed residences.
- 3.3.3** Per RSFFPD's Ordinance 2011-01, Section 503.1, the hose pull from any fire apparatus shall not be more than 150 feet to the exterior wall of the first story of a residence. This

requirement can be met with the proximity of the access roadways and turnarounds proposed.

- 3.3.4** Each hydrant shall have a connection of at least one 4-inch National Standard Thread (male), and one 2 ½ inch National Standard Thread (male). Additional outlets may be required.
- 3.3.5** The water supply system and hydrants shall be installed and tested prior to bringing any combustible building products on site.
- 3.3.6** Fire hydrants shall be located with blue reflective raised pavement markers at approved locations for each hydrant.

3.4 Ignition Resistant Construction and Fire Protection Systems

Building exterior construction including roofs, eaves, exterior walls, doors, windows, decks, and other attachments shall comply with the County Building Code Chapter 7A "Exterior Ignition-Resistance" ordinance and the Rancho Santa Fe Fire Protection District's ordinances in effect at the time of building permit application.

Following are the proposed ignition-resistant construction criteria that shall be applied to the residential structures located in this very high wildfire severity zone to further mitigate wildfire concerns for this development:

- 3.4.1** All structures shall be built with a Class A Roof Assembly, including a Class A roof covering.
- 3.4.2** Attic or foundation ventilation louvers or ventilation openings in vertical walls shall not exceed 144 square inches per opening and will be covered with 1/8-inch mesh corrosion-resistant metal screening or other approved material that offers equivalent protection. Attic ventilation will also comply with the requirements of the International Building Code (I.B.C.). Ventilation louvers and openings may be incorporated as part of access assemblies.
- 3.4.3** All chimney, flue or stovepipe openings shall have an approved spark arrester. An approved spark arrester is defined as a device constructed of nonflammable materials, 12 gauge minimum thicknesses or other material found satisfactory by the Rancho Santa Fe Fire Protection District, having ½-inch perforations for arresting burning carbon or sparks. It will be installed to be visible for the purposes of inspection and maintenance.
- 3.4.4** Exterior windows, window walls, glazed doors and glazed openings within exterior doors shall be insulating-glass units with one tempered pane, glass block, or have a fire-resistance rating of not less than 20 minutes (California Building Code, 704.2.2) or other assemblies approved by RSFFPD. All skylights shall be tempered glass.
- 3.4.5** Vinyl window assemblies are deemed acceptable if the windows have the following characteristics:
 - Frame and sash are comprised of vinyl material with welded corners
 - Metal reinforcements in the interlock area
 - Glazed with insulating glass, annealed or tempered
 - Frame and sash profiles are certified in AAMA Lineal Certification Program
 - Certified and labeled to ANSI/AAMA/NWDA 101/LS-2-97 for Structural Requirements

- 3.4.6** The exterior wall surface material for all residences shall be non-combustible or an approved alternate.
- 3.4.7** All eaves, fascias and soffits shall be enclosed (boxed) with non-combustible materials. This shall apply to the entire perimeter of each structure.
- 3.4.8** Paper-faced insulation shall be prohibited in attics or ventilated spaces.
- 3.4.9** All rain gutters, down spouts and gutter hardware shall be constructed from metal or other non-combustible material to prevent wildfire ignition along eave assemblies.
- 3.4.10** Gutters shall be designed to reduce the accumulation of leaf litter and debris that contribute to roof edge ignition.
- 3.4.11** At a minimum, all side-yard fence and gate assemblies (fences, gate and gate posts) when attached to the home shall be of non-combustible material for at least the first five (5) feet.
- 3.4.12** No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas.
- 3.4.13** All projections (exterior balconies, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections) shall be of non-combustible construction, one-hour fire resistive construction on the underside, or heavy timber construction. When such appendages and projections are attached to exterior fire-resistive walls, they shall be constructed to maintain the fire-resistive integrity of the wall.
- 3.4.14** Exterior doors shall be approved non-combustible construction, solid core wood not less than 1-3/8 inches thick or have a fire protection rating of not less than 20 minutes.
- 3.4.15** All windows shall be provided with 1/8 inch mesh metal or similar non-combustible screens to prevent embers from entering the structure during high wind conditions.
- 3.4.16** All residences built in future shall have automatic interior sprinklers installed according to the National Fire Protection Association (NFPA) 13D-Standard for the Installation of Sprinkler Systems in One and Two-Family Homes and Manufactured Homes. RSFFPD would also approve the design and installation of these systems.

3.5 Defensible (Survivable) Space and Vegetation Management

3.5.1 Fire Fuel, Terrain, Weather, Intensity Assessment

The Santa Fe Heights Subdivision Project site is vacant land, generally flat with slight downward sloping from the northeast corner to the southwest corner. On-site topography ranges from generally level to a 10 percent slope. The project is located in a very high fire hazard severity zone.

Coastal Sage Scrub historically has dominated this area. At present, a variety of plant species from this vegetation community are located on-site and off-site. These include sage, buckwheat, baccharis, lemonade berry, laurel sumac, and chamise. If this project site was left undeveloped and without any fire hazard abatement or other land use disturbance, Coastal Sage Scrub would again dominate this site. It would increase in fuel loading and become what would be classified as a typical Coastal Sage Scrub fuel model (SCAL 18 Fuel Model).

As is typical of Coastal Sage Scrub plant communities on this project site and off-site areas, a high percentage of the plants have an abundance of dead material. This is especially true of the black sage and scrub plants. This is due to the effects of the local Mediterranean climate where warm wet winters promote lots of new growth, and long, hot and very dry summer seasons often occur. Occasionally, multi-year droughts cause significant parts of these plants to die back. All of these plants are adapted to intense wildfires and a need for species regeneration. However, if wildfire occurs at too frequent intervals, the Coastal Sage Scrub plant community reverts to a more flammable, less desirable community of short lived annual grasses with little wildlife value and poor ability to protect the soil.

With the recent history of land uses (cattle grazing, wildland fires, etc.) the existing fuels will require modification, there are two important points that are significant with regard to fire impact to the site. The first is that with the site predominately non-native grassland, fires on-site would burn more quickly across the landscape but with significantly less intensity. Second, Diegan Coastal Sage Scrub would burn with greater flame lengths and intensity. During the worst case scenario of Santa Ana winds in the range of 60 MPH, the existing fuels would be less intense than if the native habitat of the Diegan Coastal Sage Scrub (SCAL 18 Fuel Model) were present in its natural state.

“Firewise” landscape management is the act of converting native vegetative fuels from a highly flammable and high fire intensity state to a more fire resistive and low fire intensity condition.

“Firewise” landscaping has been proven a very effective treatment for minimizing structure losses due to wildland fire radiant heat.



3.5.2 Required Fuel Modification Zones for the Project Site and Access

The California Fire Code (CFC) requires that a minimum of 100 feet of fuel modification be constructed and maintained around all structures greater than 250 square feet in size and extending in all directions from all structures in a development such as in the Santa Fe Heights

Subdivision Project. Ordinance 2011-01 for RSFFPD also states the need to maintain an effective fuel modification zone by removing, clearing or modifying combustible vegetation and other flammable materials from areas within 100 feet from such buildings or structures.

All landscape plans shall be submitted to the Fire District for approval prior to installation. Santa Fe Heights Subdivision property owners (TOR Investments) will be required to submit a landscape plan and have it approved before the framing or hydro inspection. Each residence will have 50 feet of permanently irrigated Zone A encircling the entire building planted with fire resistant low growing, low fuel volume plants from APPENDIX 'A' or as approved by the Fire Marshal. In addition, each home will have a Zone B which will consist of 50 feet of non-irrigated fuel treatment beyond the first 50 feet of irrigated landscaping surrounding each residence. The private roadway connecting to Artesian Road shall have 30 feet of fuel modification on each side of the road.

For this project, the fuel modification shall be implemented by defining two fuel modification zones. These fuel modification treatments for the two residences within the project are described below (*to be permanently marked/located by metal stakes on the ground*):

3.5.2.1 Zone A - Irrigated. Homeowner Maintained. (*Shown as the green color on Fire Protection Plan Map*). Zone A shall generally be the landscaped areas on the level portion of the building pad and manufactured slopes. The Santa Fe Heights Subdivision property owners (TOR Investments) will be required to maintain front, side and back yards within 50 feet of each residence with irrigated “firewise” Zone A landscaping. Manufactured slopes shall be maintained to Irrigated Zone A criteria and planted with “firewise” fire resistive trees and plants. The following are additional vegetation modifications recommended for the defensible space around structures:

- 3.5.2.1.1** All undesirable vegetation (See APPENDIX 'B') shall be removed and replanted, if needed, with drought tolerant, fire resistive “firewise” landscaping.
- 3.5.2.1.2** There shall be limited planting or maintaining of large unbroken masses of trees and large shrubs. Groups may not exceed three trees, with mature foliage of any group, separated horizontally by at least 10 feet when planted on less than 20 percent slopes.
- 3.5.2.1.3** If shrubs are located underneath a tree's drip line, the lowest branch shall be at least three times as high as the understory shrubs or 10 feet, whichever is greater.
- 3.5.2.1.4** Vegetation may include single or cluster of trimmed fire resistive native and ornamental plants (oaks, sumac, toyon—See APPENDIX 'A').
- 3.5.2.1.5** Provide low growing, fire resistive, deep rooted, drought tolerant planting to maintain erosion control and soil stability, especially on manufactured slopes.
- 3.5.2.1.6** All the dead material must be pruned out of all vegetation on an as needed basis, annually by June 1st.
- 3.5.2.1.7** This landscape Zone shall be permanently irrigated.
- 3.5.2.1.8** Mulches, chips and other small multi-cuttings (cut to less than two inches in diameter and four inches in length) can be evenly spread over the area no more than 4 inches deep and at least 12 inches from structures. This can be used to prevent grass and weed encroachments within the treated areas. This mulching concept can also help to maintain soil moisture for designated plants, reduces the

growth of annual grasses and minimizes soil erosion.

- 3.5.2.1.9** Firewood and combustible material shall not be stored in unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs. Stacked woodpiles will be at least 30 feet from all structures and clear of any flammable vegetation within 10 feet.
- 3.5.2.1.10** Highly flammable plant species shall be permanently removed from the Zone due to their being either exotic and/or for their susceptibility to wildland fire.
- 3.5.2.1.11** In addition, certain ornamental plants shall not be planted or allowed to become established within the Zone unless otherwise noted in the Recommended Plant List in APPENDIX 'A' or as approved by the RSFFPD Fire Marshal.
- 3.5.2.1.12** The location of propane tanks shall comply with the California Fire Code (see CFC, Table 3804.3).
- 3.5.2.1.13** RSFFPD's Ordinance No. 2011-01 requires the clearance of flammable vegetation and other combustible growth along the improved width of new, onsite roadways within 30 feet on each side. Accordingly, 30 feet on either side of Calle Montana shall be cleared of any flammable vegetation and other combustible growth.

3.5.2.2 Zone B – Homeowner Maintained. (Shown as the **lime green** color on the Fire Protection Plan Map). Zone B begins at the outer most edge of the Zone A and continues outward for the next 50 feet or to the lot line where all flammable vegetation or other combustible growth is cleared away or modified and the remaining natural fuel volume will be thinned to 50 percent of the natural wildland fuels, including the designated target species found later in this section. This Zone shall include the dedicated removal or thinning of live plant material (plus the removal of dead, woody debris) and “firewise” fire resistive trees and plants. Irrigation may occur to establish approved vegetation, if applicable. Following are mitigation and added requirements for this Zone:

- The following native species will not be permitted to grow in this zone even as specimen plants because of their flammability:
- California sagebrush, *Artemisia californica*;
- Flat-topped buckwheat, *Eriogonum fasciculatum*; and,
- Black sage, *Salvia mellifera*.

There are other undesirable native and non-native plant materials that will not be permitted in this Zone (See APPENDIX 'B').

- 3.5.2.2.1** Mulches, chips and other small multi-cuttings (minimally cut to less than two inches in diameter and four inches in length) can be evenly spread over the area no more than 4 inches deep. This can be used to prevent grass and weed encroachments within the treated areas. This mulching concept can also help to maintain soil moisture for designated plants, reduce the growth of annual grasses and minimize soil erosion.
- 3.5.2.2.2** Zone B fuel modification criteria shall be required for roadways to remove flammable and combustible vegetation within 30 feet of newly constructed roadways.
- 3.5.2.2.3** Single species of fire resistive trees, ornamental shrubbery or cultivated ground cover such as grass, ivy, succulents or similar plants used as ground covers can be used as landscaping, provided that they do not form a means of readily transmitting fire.

- 3.5.2.2.4** Large continuous masses of shrubs and understory less than 15 feet in height will be thinned to remove fuel and provide at least ten (10) feet between shrub masses, or individual shrubs.

3.6 Additional Requirements

- 3.6.1** When an auxiliary structure is attached to a residence, a 100 foot fuel modification zone shall extend from the attached structure's perimeter (e.g., overhead covers and decking not enclosed on three sides). For a detached auxiliary structure less than 250 square feet, the 100 foot fuel modification zone shall extend from the residence outward, not the auxiliary structure (e.g., gazebos, shed trellis, etc.). For a detached auxiliary structure greater than 250 square feet, the 100 foot fuel modification zone shall extend from the auxiliary structure (e.g., guest house, pool cabana, etc.).
- 3.6.2** Structures shall have a minimum setback from any property line of 30 feet.
- 3.6.3** Brush removal shall be completed prior to commencing any flammable construction. During construction at least 50 feet of clearance around the structures shall be free of all flammable vegetation as an interim fuel modification zone during construction of any structure.
- 3.6.4** The annual completion of all designated Fuel Modification treatments shall occur prior to June 1st each year.
- 3.6.5** All individual landscaping plans, including additional structures, shall comply with the Fire Protection Plan. Any disputes of yard landscaping with regard to interpretation of this Fire Protection Plan (FPP) shall be decided by the RSFFPD Fire Marshal. The Fire Marshal's decision will be final and binding on the landowner.
- 3.6.6** Any damaged or replacement window, siding, roof coverings, and other mitigation measures shall meet or exceed the original intent of the fire protection discussed in this Plan.
- 3.6.7** The Applicant shall modify the secondary automatic gates, which shall operate 24/7, to the Crosby gate system so that can be operated remotely by the 24 hour security guard.
- 3.6.8** This report and its recommendations shall be incorporated by reference into the final Conditions of Approval.

3.7 Maintenance Responsibility

The owner of each residence will be responsible for maintaining the fire resistive landscaping, the removal of undesirable vegetation, and general upkeep of the property to provide a "firewise" environment.

3.8 Fire Fuel Assessment Summary

Fire resistive landscape management is the act of converting native vegetative fuels from a highly flammable and high fire intensity state to a more fire resistive and low fire intensity condition. Fire resistive landscaping has been proven to very effective treatment for minimizing structure losses due to wildland fire radiant heat.

For this project site, the typical prevailing summer time wind pattern is out of the west/southwest and normally is of a much lower velocity (5-10 MPH with occasional gusts to 20 MPH), and is

associated with relative humidity readings greater than 15 percent. During the hot summer months, there are expected "rare events" with 30 MPH winds which will create extreme fire behavior along the south to southwest boundary.

The most serious and strongest winds would be the northeast, off-shore Santa Ana winds. It is reasonable to expect Santa Ana winds in the range of 60 MPH within this portion of San Diego County. A fire burning under this wind condition and in the presently existing fuels along the northeast boundary will align with these unusually high velocity winds, which occur 2-3 times a year, during the time of year when fuels are their driest. A wind or topography driven wildfire burning under a north to northeastern (*Santa Ana*) wind pattern creates the greatest wildland fire hazard for this project. Although any plant will burn, wildland fire research has shown repeatedly that some types of plants, including many natives, are more fire resistive.

The Recommended Plant List in APPENDIX 'A' includes a listing of these low fuel volume, non-oily, non-resinous plants commonly referred to as fire resistant or fire resistive. These terms come with the proviso that each year these plants are pruned, all dead wood is removed, and all grasses or other plant material are removed from beneath the circumference of their canopies.

There are undesirable native and exotic species. APPENDIX 'B' is the San Diego County Undesirable Plant List. None of these plants shall become established within a fuel treatment zone as most of them readily ignite.

The minute-by-minute movement of a wildland fire will probably never be totally predictable, certainly not from weather conditions forecast many hours before the fire. Nevertheless, practice and experienced judgment in assessing the fire environment coupled with a systematic method of calculating fire behavior, yields surprisingly good results (Rothermel 1983).

Three principal factors are responsible for structure ignitions:

- Flame radiation
- Flame impingement – convection
- Firebrands (burning embers)

Radiation and convection involve the transfer of heat directly from the flame. Firebrands involve the aerial transport of burning materials to a combustible fuel receptacle (structure, roofing, open vents, etc.) from vegetation or other burning materials. Ignition from radiation (given an exposed flammable surface) from radiation heat transfer depends on two aspects of the flame: 1) the radiant heat flux to a combustible surface, and 2) the duration (length of time) of the radiant flux. The radiant heat flux depends on the flame zone size, flame-structure distance, and how much the combustible material of the structure is exposed to the flame. Fire agencies consider vegetation management as a principal approach to wildland fire hazard reduction. Whenever the flame length, one-to-two minutes in duration or more, is equal to or more than the separation of combustible vegetation column, ignition of the vegetation column may occur. However, the temperature of the column's gases are generally not as hot or long enough in duration to sustain the ignition of a structure.

Firebrands – Firebrands are pieces of burning materials that detach from a burning fuel due to the strong convection drafts in the burning zone. Firebrands can be carried a long distance (one mile or more) by fire drafts or strong winds. Severe wildland/urban interface fires can produce heavy showers of firebrands. The chance of firebrands igniting a structure will depend on the size of the firebrand, how long it burns after contact, and the type of building materials, building design, and construction sources for structure ignition. They can also enter a structure through unscreened vents, decks and chimneys, non-metal skylights and other overhangs. Even with non-combustible roofing, firebrands landing on leaves, needles, and other combustibles located on a roof (due to lack of maintenance) can cause structure ignition. Any

open windows, doors or other type of unscreened openings are sources for embers to enter a structure during a wildland fire.

FIREWISE 2000, Inc. used the computer based BEHAVE Fire Behavior Prediction Model to make four (4) fire behavior assessments for the Santa Fe Heights Subdivision Project. Two of these are for natural pre-existing conditions, and two for the recommended fuel treatments.

Wildland fire behavior calculations have been projected for the hazardous vegetative fuels on the undeveloped sites adjacent to, immediately bordering and within the proposed Santa Fe Heights Subdivision Project (see APPENDIX 'C' – Fire Modeling and Fire Behavior Calculations).

The summary display below shows the expected Rate of Fire Spread (expressed in feet per minute), Fireline Intensity (Btu/ft/sec) and Flame Length (feet) for 2 different fuel model computer calculations. These calculations are based first on expected fire behavior for on-site and off-site natural vegetation conditions of a fuel model SCAL 18 – Sage/Buckwheat/Scrub typical of the area. Secondly, calculations on expected fire behavior with the fuel modification and treatment within the prescribed 100-ft Zone. Variables were slope, projected wind speed, and anticipated weather.

SUMMARY OF FIRE BEHAVIOR MODELING RESULTS

SCENARIO 1 – 60-mph NE Wind			SCENARIO 2 - 60-mph		
<u>Prior to Fuel Treatment</u>			<u>After Fuel Treatment</u>		
Rate of Spread	289 ft/min		Rate of Spread	626 ft/min	
Fireline Intensity	20978 BTU/ft/sec	VS	Fireline Intensity	1630 BTU/ft/sec	
Flame Length	43.8 Feet		Flame Length	13.5 Feet	
SCENARIO 3 – 30-mph SW Wind			SCENARIO 4 – 30-mph SW Wind		
<u>Prior to Fuel Treatment</u>			<u>After Fuel Treatment</u>		
Rate of Spread	153 ft/min		Rate of Spread	598 ft/min	
Fireline Intensity	11100 BTU/ft/sec	VS	Fireline Intensity	1415 BTU/ft/sec	
Flame Length	32.7 Feet		Flame Length	12.7 Feet	

Comparing the expected wildland fire behavior projections of untreated vegetation with treated vegetation demonstrates substantial reductions in the expected rate of spread, flame length and fireline intensity.

In summary, any wind or topography driven wildfire burning under a north to northeastern (Santa Ana) wind pattern creates the greatest wildland fire hazard for this project. It is also illustrated that expected fire behavior along the south to southwestern boundary in a “rare event” 30 MPH southwest wind would create a severe fire hazard concern.

3.9 Proposed Plant Species

Plants used will be those approved on the County of San Diego Acceptable Plant List for Santa Fe Heights FPP (TM 5556)

Defensible Space (APPENDIX 'A') or other recommended plant species meeting the criteria for fire resistive plant characteristics that have been certified by the applicant's landscape architect and in concurrence with the Rancho Santa Fe Fire Protection District. Prohibited and Invasive Plants (APPENDIX 'B') will not be permitted and if present shall be removed. All landscape plans shall be submitted to the Fire District for approval prior to installation. Santa Fe Heights Subdivision property owners (TOR Investments) will be required to submit a landscape plan and have it approved before the framing or hydro inspection.

3.10 Cumulative Impact Analysis

The existing and proposed General Plan designation for this structural density is very low development density, i.e., 2 DU's/Ac for the project site. The combination of San Diego County's inland valley weather, fuel, and terrain has often contributed to intense, uncontrolled wildland fires. This was clearly evident in the devastating Witch Fire of 2007. Typically, the areas of greatest concern are adjacent to urbanized areas or where residences are intermixed with wildlands.

The following identifies how the subdivision would contribute to the impact and mitigation measures that would address this development proposal and the mitigation measure(s) proposed to address this impact (e.g., project compliance with codes/standards).

As the population of San Diego County increases and the Wildland Urban Interface (WUI) expands, fire hazards and risks will continue to be encountered. The approval of this proposal, the already approved developments in the area, and future development proposals will increase the concern of wildland wildfire as the area becomes more urbanized, unless a "firewise" environment is implemented as described herein. At present, the density of the proposed development in this southeast portion of Rancho Santa Fe Fire Protection District is low and will include properties compliant with the fuel modification and weed abatement requirements of the Rancho Santa Fe Fire Protection District.

Chapter 4 - MITIGATION MEASURES AND DESIGN CONSIDERATIONS

This chapter is a documentation summary of the proposed improvements and mitigation measures that will reduce the significance level to "less than significant" and/or provide a "same practical effect" for this proposed minor subdivision.

4.1 Water Supply

The development will be connected to the Olivenhain Municipal Water District (See APPENDIX 'E' – Water Service Availability Form). Water supply can meet the water supply requirements for single family units in accordance with California Fire Code Section 903, Chapter 7a of the California Building Code and the Rancho Santa Fe Fire Protection District's Ordinance 2011-01, Section 507.3 as documented in Section 3.3 of this FPP. Additionally, the project will provide an improved location for the fire hydrant location that will significantly enhance fire protection for the residences.

4.2 Ignition-Resistant Construction

The requirement to ignition-resistant construction for the future residences will provide significant protection in this very high fire hazard zone. Ignition-resistant construction requirements will provide critical improvements to survive a worst case scenario fire storm in this rural residential area. Another significant requirement will be that the maintenance and

repair of these proposed residences will be with the same ignition-resistant materials and construction features. Also, the FPP requires that ignition-resistant construction will apply to mitigate the ignitability of all future proposed structures and projections (exterior balconies, carports, decks, patio covers, unenclosed roofs and floors, etc.).

The survivability of these future residential units will, then, be dependent on the ignition-resistant construction materials for protection from a wildland wildfire event in the immediate vicinity.

4.3 Vegetation Modification

For individual residences on this property, fuel modification will be achieved by removing, clearing, or modifying away combustible vegetation and other flammable materials from areas within 100 feet from the structures. The 100 feet of fuel modification outward beyond the edge of each residence can be met on each parcel.

Ignition-resistant construction, other fire protection systems (e.g., automatic water sprinklers) enhanced fuel modification, and an enhanced fire water supply provides ample mitigation to acquire an exemption to the dead-end road distance requirements.

4.4 Fire Protection Plan Map

The FIRE PROTECTION PLAN MAP provided with this FPP document depicts the location of all proposed fuel modification treatments and other mitigation measures on the Santa Fe Heights Subdivision project.

Chapter 5 - LIST OF PREPARERS AND PERSONS CONTACTED

5.1 List of Preparers

The principle author and preparer of this Fire Protection Plan is David M. Bacon, Wildland Fire Associate of **FIREWISE 2000, Inc.**, and certified by David C. Bacon, President of **FIREWISE 2000, Inc.**, a San Diego County DPLU certified wildland fire consultant.

5.2 List of Persons Contacted During the Course of This Project

5.1.1 Dan E. Rehm, Hunsaker & Associates, 9707 Waples St., San Diego, CA 92121

5.1.2 Cliff Hunter, Fire Marshal, Rancho Santa Fe Fire Protection District

TECHNICAL APPENDICES

APPENDIX 'A' – ACCEPTABLE PLANT LIST FOR DEFENSIBLE SPACE

APPENDIX 'B' – PROHIBITED PLANT LIST & INVASIVE PLANT LIST

APPENDIX 'C' – BEHAVEPLUS VERSION 3.02 FIRE BEHAVIOR CALCULATIONS

APPENDIX 'D' – IGNITION-RESISTANT BUILDING MATERIALS

APPENDIX 'E' – FIRE AND WATER FACILITY AVAILABILITY FORMS

APPENDIX 'F' – LITERATURE REFERENCED

APPENDIX 'G' – SECONDARY ACCESS APPROVAL LETTER AND EASEMENTS

APPENDIX 'A'
COUNTY OF SAN DIEGO
ACCEPTABLE PLANTS FOR DEFENSIBLE SPACE
IN FIRE PRONE AREAS

ALL NATIVE PLANTS ON THE FOLLOWING LIST are considered to be drought-tolerant in the particular climate zone they are found. Those that grow best in riparian areas, as indicated by the "R", are generally the least drought-tolerant plants on the list.

SPECIAL NOTE: When planting, it is necessary to water deeply to encourage the plant roots to seek natural moisture in the soil. This watering should continue for at least three years to allow the plants to naturalize. More water should be provided in summer and less (if any) in the winter. These plants should be weaned off the supplemental irrigation and become less dependent on it over the establishment period.

No plant is totally fire resistant. The plants listed were chosen to due to their high water content, minimum amount of flammable resins and/or low fuel volume.

Definitions:

Defensible Space: The area around a structure, where material capable of causing fire has been cleared, reduced or changed, to act as a barrier between an advancing fire and the structure.

Drought-Tolerant Plant Materials: Trees, shrubs, groundcovers, and other vegetation capable of sustained growth and reproduction with only natural moisture. Occasional supplemental irrigation is necessary only in extreme drought situations.

Establishment Period: The time it takes for a plant to become drought-resistant. This is usually a period of three years and is the time when supplemental irrigation is necessary.

Native or Naturalizing Plant Species: Plant species native to the region or introduced which, once established, are capable of sustaining growth and reproduction under local climatic conditions without supplemental irrigation.

FIRE WISE 2000, Inc. **Note:** The plant list which follows was developed using the plants found on the San Diego County approved plant list. This list was then compared to those plants which are suitable for the climatic zone in which the project is located. Only those plants suitable for the project area listed below. The list is therefore shorter than that provided by the County. By providing this custom list, plants that are likely to be killed or seriously damaged by frost or will not perform in hot dry conditions have been eliminated. ***FIRE WISE 2000, Inc.*** believes that the planting of species suited to the site is essential to fire management goals and is an environmentally sound practice.

San Diego County
Customized Acceptable Plant List
For Santa Fe Heights Project

No.	<u>Type</u>	<u>Genus</u>	<u>Species</u>	<u>Common Name</u>
1	Annual	Lupinus spp.	nanus	Lupine
2	Groundcover	Achillea	millefolium	Yarrow
3	Groundcover	Aptenia	cordifolia	Aptenia
4	Groundcover	Arctostaphylos spp.		Manzanita
5	Groundcover	Cerastium	tomentosum	Snow-in-Summer
6	Groundcover	Coprosma	kirkii	Creeping Coprosma
7	Groundcover	Cotoneaster spp.		Redberry
8	Groundcover	Drosanthemum	hispidum	Rosea Ice Plant
9	Groundcover	Dudleya	brittonii	Britton's Chalk Dudleya
10	Groundcover	Dudleya	pulverulenta	Chalk Dudleya
11	Groundcover	Dudleya	virens	Island Live-Forever
12	Groundcover	Eschscholzia	californica	California Poppy
13	Groundcover	Ferocactus	viridescens	Coast Barrel Cactus
14	Groundcover	Gaillardia	grandiflora	Blanket Flower
15	Groundcover	Gazania spp.		Gazania
16	Groundcover	Helianthemum spp.		Sunrose
17	Groundcover	Lantana spp.		Lantana
18	Groundcover	Lasthenia	californica	Common Goldfields
19	Groundcover	Lasthenia	glabrata	Coastal Goldfields
20	Groundcover	Lupinus spp.		Lupine
21	Groundcover	Myoporum spp.		Myoporum
22	Groundcover	Pyracantha spp.		Firethorn
23	Groundcover	Rosmarinus	officinalis	Rosemary
24	Groundcover	Santolina	chamaecyparissus	Lavender Cotton
25	Groundcover	Santolina	virens	Santolina
26	Groundcover	Trifolium	frageriferum	O'Connor's Legume
27	Groundcover	Verbena	rigida	Verbena
28	Groundcover	Viguiera	laciniata	San Diego Sunflower
29	Groundcover	Vinca	major	Periwinkle
30	Groundcover	Vinca	minor	Dwarf Periwinkle
31	Perennial	Coreopsis	gigantea	Giant Coreopsis
32	Perennial	Coreopsis	grandiflora	Coreopsis
33	Perennial	Coreopsis	maritima	Sea Dahlia
34	Perennial	Coreopsis	verticillata	Coreopsis
35	Perennial	Heuchera	maxima	Island Coral Bells
36	Perennial	Iris	douglasiana	Douglas Iris
37	Perennial	Kniphofia	uvaria	Red-Hot Poker
38	Perennial	Lavandula spp.		Lavender
39	Perennial	Limonium	californicum perezii	Coastal Statice
40	Perennial	Limonium	californicum var. mexicanum	Coastal Statice
41	Perennial	Oenothera spp.		Primrose
42	Perennial	Penstemon spp.		Penstemon
43	Perennial	Satureja	douglasii	Yerba Buena
44	Perennial	Sisyrinchium	bellum	Blue-Eyed Grass

No.	<u>Type</u>	<u>Genus</u>	<u>Species</u>	<u>Common Name</u>
45	Perennial	Sisyrinchium	californicum	Golden-Eyed Grass
46	Perennial	Solanum	xanthii	Purple Nightshade
47	Perennial	Zauschneria	'Catalina' ?	Catalina Fuschia
48	Perennial	Zauschneria	californica	California Fuschia
49	Perennial	Zauschneria	cana	Hoary California Fuschia
50	Shrub	Agave	americana	Desert Century Plant
51	Shrub	Agave	Amorpha fruticosa	False Indigobush
52	Shrub	Agave	deserti	Shaw's Century Plant
53	Shrub	Agave	shawii	NCN
54	Shrub	Agave		Century Plant
55	Shrub	Arctostaphylos spp.		Manzanita
56	Shrub	Atriplex	canescens	Hoary Saltbush
57	Shrub	Baccharis	pilularis	Coyote Bush
58	Shrub	Baccharis	salicifolia	Mule Fat "R"
59	Shrub	Carissa	macrocarpa	Natal Plum
60	Shrub	Ceanothus spp.		California Lilac
61	Shrub	Cistus spp.		Rockrose
62	Shrub	Cneoridium	dumosum	Bush rue
63	Shrub	Comarostaphylis	diversifolia	Summer Holly
64	Shrub	Convolvulus	cneorum	Bush Morning Glory
65	Shrub	Dalea	attenuata v orcuttii	Orcutt's Delea
66	Shrub	Elaeagnus	pungens	Silverberry
67	Shrub	Encelia	californica	Coast Sunflower
68	Shrub	Encelia	farinosa	White Brittlebush
69	Shrub	Eriobotrya	deflexa	Bronze Loquat
70	Shrub	Eriophyllum	confertiflorum	Golden Yarrow
71	Shrub	Escallonia spp.		Escallonia
72	Shrub	Feijoa	sellowiana	Pineapple Guava
73	Shrub	Fremontodendron	californicum	Flannelbush
74	Shrub	Fremontodendron	mexicanum	Southern Flannelbush
75	Shrub	Galvezia	junceae	Baja Bush-Snapdragon
76	Shrub	Galvezia	speciosa	Island Bush-Snapdragon
77	Shrub	Garrya	elliptica	Coast Silktassel
78	Shrub	Garrya	flavescens	Ashy Silktassel
79	Shrub	Heteromeles	arbutifolia	Toyon
80	Shrub	Lantana spp.		Lantana
81	Shrub	Lotus	scoparius	Deerweed
82	Shrub	Mahonia spp.		Barberry
83	Shrub	Malacothamnus	clementinus	San Clemente Island Bush Mallow
84	Shrub	Malacothamnus	fasciculatus	Mesa Bushmallow
85	Shrub	Melaleuca spp.		Melaleuca
86	Shrub	Mimulus spp.		Monkeyflower
87	Shrub	Nolina	parryi	Parry's Nolina
88	Shrub	Photinia spp.		Photinia
89	Shrub	Pittosporum	crassifolium	NCN
90	Shrub	Pittosporum	rhombifolium	Queensland Pittosporum
91	Shrub	Pittosporum	tobira 'Wheeleri'	Wheeler's Dwarf
92	Shrub	Pittosporum	undulatum	Victorian Box
93	Shrub	Pittosporum	viridiflorum	Cape Pittosporum
94	Shrub	Plumbago	auriculata	Cape Plumbago

<u>No.</u>	<u>Type</u>	<u>Genus</u>	<u>Species</u>	<u>Common Name</u>
95	Shrub	Prunus	caroliniana	Carolina Laurel Cherry
96	Shrub	Prunus	ilicifolia	Hollyleaf Cherry
97	Shrub	Prunus	lyonii	Catalina Cherry
98	Shrub	Puncia	granatum	Pomegranate
99	Shrub	Pyracantha spp.		Firethorn
100	Shrub	Quercus	dumosa	Scrub Oak
101	Shrub	Rhamus	alaternus	Italian Buckthorn
102	Shrub	Rhamus	californica	Coffeeberry
103	Shrub	Rhaphiolepis spp.		Rhaphiolepis
104	Shrub	Rhus	continus	Smoke Tree
105	Shrub	Rhus	integrifolia	Lemonade Berry
106	Shrub	Rhus	laurina	Laurel Sumac
107	Shrub	Rhus	ovata	Sugarbush
108	Shrub	Rhus	trilobata	Squawbush
109	Shrub	Romneya	coulteri	Matilija Poppy
110	Shrub	Rosa	californica	California Wild Rose
111	Shrub	Rosa	minutifolia	Baja California Wild Rose
112	Shrub	Salvia spp.		Sage
113	Shrub	Sambucus spp.		Elderberry
114	Shrub	Symphoricarpos	mollis	Creeping Snowberry
115	Shrub	Syringa	vulgaris	Lilac
116	Shrub	Tecomaria	capensis	Cape Honeysuckle
117	Shrub	Teucrium	fruticans	Bush Germander
118	Shrub	Verbena	lilacina	Lilac Verbena
119	Shrub	Xylosma	congestum	Shiny Xylosma
120	Shrub	Yucca	schidigera	Mojave Yucca
121	Shrub	Yucca	whipplei	Foothill Yucca
121	Tree	Acer	macrophyllum	Big Leaf Maple
122	Tree	Acer	saccharinum	Silver Maple
123	Tree	Alnus	rhombifolia	White Alder "R"
124	Tree	Arbutus	unedo	Strawberry Tree
125	Tree	Archontophoenix	cunninghamiana	King Palm
126	Tree	Brahea	armata	Blue Mexican Palm
127	Tree	Brahea	edulis	Guadalupe Palm
128	Tree	Ceratonia	siliqua	Carob
129	Tree	Cercis	occidentalis	Western Redbud
130	Tree	Cornus	stolonifera	Redtwig Dogwood
131	Tree	Eriobotrya	japonica	Loquat
132	Tree	Erythrina	caffra	Kaffirboom Coral Tree
133	Tree	Ginkgo	biloba "Fairmount"	Fairmount Maidenhair Tree
134	Tree	Juglans	californica	California Walnut
135	Tree	Lagerstroemia	indica	Crape Myrtle
136	Tree	Ligustrum	lucidum	Glossy Privet
137	Tree	Liquidambar	styraciflua	Sweet Gum
138	Tree	Liriodendron	tulipifera	Tulip Tree
139	Tree	Lyonothamnus	floribundus ssp. Asplenifolius	Fernleaf Catalina Ironwood
140	Tree	Melaleuca spp.		Melaleuca
141	Tree	Myoporum spp.		Myoporum
142	Tree	Nerium	oleander	Oleander
143	Tree	Parkinsonia	aculeata	Mexican Palo Verde

No.	<u>Type</u>	<u>Genus</u>	<u>Species</u>	<u>Common Name</u>
144	Tree	Pistacia	chinensis	Chinese Pistache
145	Tree	Pistacia	vera	Pistachio Nut
146	Tree	Pittosporum	phillyreoides	Willow Pittosporum
147	Tree	Pittosporum	viridiflorum	Cape Pittosporum
148	Tree	Platanus	acerifolia	London Plane Tree
149	Tree	Platanus	racemosa	California Sycamore "R"
150	Tree	Populus	alba	White Poplar
151	Tree	Populus	fremontii	Western Cottonwood "R"
152	Tree	Populus	trichocarpa	Black Cottonwood "R"
153	Tree	Prunus	caroliniana	Carolina Laurel Cherry
154	Tree	Prunus	cersifera 'Newport'	Newport Purple-Leaf Plum
155	Tree	Prunus	ilicifolia	Hollyleaf Cherry
156	Tree	Prunus	lyonii	Catalina Cherry
157	Tree	Prunus	xblireiana	Flowering Plum
158	Tree	Quercus	agrifolia	Coast Live Oak
159	Tree	Quercus	engelmannii	Engelmann Oak
160	Tree	Quercus	suber	Cork Oak
161	Tree	Rhus	lancea	African Sumac
162	Tree	Salix spp.		Willow "R"
163	Tree	Tristania	conferta	Brisbane Box
164	Tree	Ulmus	parvifolia	Chinese Elm
165	Tree	Ulmus	pumila	Siberian Elm
166	Tree	Umbellularia	californica	California Bay Laurel "R"
167	Vine	Antigonon	leptopus	San Miguel Coral Vine
168	Vine	Distictis	buccinatoria	Blood-Red Trumpet Vine
169	Vine	Keckiella	cordifolia	Heart-Leaved Penstemon
170	Vine	Lonicera	japonica 'Halliana'	Hall's Honeysuckle
171	Vine	Lonicera	subspicata	Chaparral Honeysuckle
172	Vine	Solanum	jasminoides	Potato Vine

APPENDIX 'B'

UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 50 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio. Many of these species, if existing on the property and adequately maintained (pruning, thinning, irrigation, litter removal, and weeding), may remain as long as the potential for spreading a fire has been reduced or eliminated.

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
<u>Abies species</u>	Fir Trees
<u>Acacia species</u>	Acacia (trees, shrubs, groundcovers)
<u>Adenostoma sparsifolium</u> **	Red Shanks
<u>Adenostoma fasciculatum</u> **	Chamise
<u>Agonis juniperina</u>	Juniper Myrtle
<u>Araucaria species</u>	Monkey Puzzle, Norfolk Island Pine
<u>Artemisia californica</u> **	California Sagebrush
<u>Bambusa species</u>	Bamboo
<u>Cedrus species</u>	Cedar
<u>Chamaecyparis species</u>	False Cypress
<u>Coprosma pumila</u>	Prostrate Coprosma
<u>Cryptomeria japonica</u>	Japanese Cryptomeria
<u>Cupressocyparis leylandii</u>	Leylandii Cypress
<u>Cupressus forbesii</u> **	Tecate Cypress
<u>Cupressus glabra</u>	Arizona Cypress
<u>Cupressus sempervirens</u>	Italian Cypress
<u>Dodonea viscosa</u>	Hopseed Bush
<u>Eriogonum fasciculatum</u> **	Common Buckwheat
<u>Eucalyptus species</u>	Eucalyptus
<u>Heterotheca grandiflora</u> **	Telegraph Plant
<u>Juniperus species</u>	Junipers
<u>Larix species</u>	Larch
<u>Lonicera japonica</u>	Japanese Honeysuckle
<u>Miscanthus species</u>	Eulalia Grass
<u>Muehlenbergia species</u> **	Deer Grass
<u>Palmae species</u>	Palms
<u>Picea species</u>	Spruce Trees
<u>Pickeringia Montana</u> **	Chaparral Pea
<u>Pinus species</u>	Pines
<u>Podocarpus species</u>	Fern Pine
<u>Pseudotsuga menziesii</u>	Douglas Fir
<u>Rosmarinus species</u>	Rosemary
<u>Salvia mellifera</u> **	Black Sage
<u>Taxodium species</u>	Cypress
<u>Taxus species</u>	Yew
<u>Thuja species</u>	Arborvitae
<u>Tsuga species</u>	Hemlock
<u>Urtica urens</u> **	Burning Nettle

** San Diego County native species

APPENDIX 'B' References:

Gordon, H. White, T.C. 1994. Ecological Guide to Southern California Chaparral Plant Series. Cleveland National Forest.

Willis, E. 1997. San Diego County Fire Chief's Association. Wildland/Urban Interface Development Standards.

City of Oceanside, California. 1995. Vegetation Management. Landscape Development Manual. Community Services Department, Engineering Division.

City of Vista, California 1997. Undesirable Plants. Section 18.56.999. Landscaping Design, Development and Maintenance Standards.

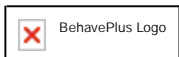
www.bewaterwise.com. 2004. Fire-resistant California Friendly Plants.

www.ucfpl.ucop.edu. 2004. University of California, Berkeley, Forest Products Laboratory, College of Natural Resources. Defensible Space Landscaping in the Urban/Wildland Interface. A Compilation of Fire Performance Ratings of Residential Landscape Plants.

County of Los Angeles Fire Department. 1998. Fuel Modification Plan Guidelines. Appendix I, Undesirable Plant List, and Appendix II, Undesirable Plant List.

APPENDIX ‘C’

BehavePlus Version 3.0.2 Fire Behavior Calculations



BehavePlus 3.0.2 (Build 265)

30 MPH SCAL 18

Mon, May 25, 2009 at 17:03:01

Input Worksheet**Modules: SURFACE**

Input Variables	Input Value(s)	Units
-----------------	----------------	-------

Fuel/Vegetation, Surface/Understory

Fuel Model	SCAL18	
------------	--------	--

Fuel Moisture

1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent

Weather

Midflame Wind Speed	12	mi/h
Direction of Wind Vector (from upslope)	225	deg

Terrain

Slope Steepness	10	percent
-----------------	----	---------

Notes**Run Option Notes**

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

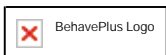
Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	153	ft/min
Heat per Unit Area	4358	Btu/ft ²
Fireline Intensity	11100	Btu/ft/s
Flame Length	32.7	ft
Direction of Maximum Spread (from upslope)	225	deg
Max Eff Wind Exceeded?	No	

End



BehavePlus 3.0.2 (Build 265)

SW 30 MPH FM 1, FM 9
 Mon, May 25, 2009 at 17:11:17

Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
-----------------	----------------	-------

Fuel/Vegetation, Surface/Understory

First Fuel Model	1	
Second Fuel Model	9	
First Fuel Model Coverage	80	percent

Fuel Moisture

1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent

Weather

Midflame Wind Speed	12	mi/h
Direction of Wind Vector (from upslope)	225	deg

Terrain

Slope Steepness	10	percent
-----------------	----	---------

Notes

Run Option Notes

Two fuel model weighting method: area-weighted [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

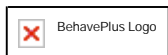
Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	598.0	ft/min
Heat per Unit Area	488	Btu/ft ²
Fireline Intensity	1415	Btu/ft/s
Flame Length	12.7	ft
Direction of Maximum Spread (from upslope)	225	deg
Max Eff Wind Exceeded?	No	

End



BehavePlus 3.0.2 (Build 265)

NE 60 MPH FM 1, FM 9
 Mon, May 25, 2009 at 17:12:52

Input Worksheet

Modules: SURFACE

Input Variables	Input Value(s)	Units
-----------------	----------------	-------

Fuel/Vegetation, Surface/Understory

First Fuel Model	1	
Second Fuel Model	9	
First Fuel Model Coverage	80	percent

Fuel Moisture

1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent

Weather

Midflame Wind Speed	24	mi/h
Direction of Wind Vector (from upslope)	45	deg

Terrain

Slope Steepness	10	percent
-----------------	----	---------

Notes

Run Option Notes

Two fuel model weighting method: area-weighted [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

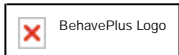
Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	625.8	ft/min
Heat per Unit Area	488	Btu/ft ²
Fireline Intensity	1630	Btu/ft/s
Flame Length	13.5	ft
Direction of Maximum Spread (from upslope)	45	deg
Max Eff Wind Exceeded?	No	

End



BehavePlus 3.0.2 (Build 265)

Mon, May 25, 2009 at 16:57:07

Input Worksheet**Modules: SURFACE**

Input Variables	Input Value(s)	Units
-----------------	----------------	-------

Fuel/Vegetation, Surface/Understory

Fuel Model	SCAL18	
------------	--------	--

Fuel Moisture

1-h Moisture	2	percent
10-h Moisture	3	percent
100-h Moisture	5	percent
Live Herbaceous Moisture	30	percent
Live Woody Moisture	50	percent

Weather

Midflame Wind Speed	24	mi/h
Direction of Wind Vector (from upslope)	45	deg

Terrain

Slope Steepness	10	percent
-----------------	----	---------

Notes**Run Option Notes**

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always

for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Results

Output Variable	Value	Units
Surface Rate of Spread (maximum)	289	ft/min
Heat per Unit Area	4358	Btu/ft ²
Fireline Intensity	20978	Btu/ft/s
Flame Length	43.8	ft
Direction of Maximum Spread (from upslope)	45	deg
Max Eff Wind Exceeded?	No	

End

APPENDIX 'D'

Non-Combustible & Ignition Resistant Building Materials For Balconies, Carports, Decks, Patio Covers and Floors

Examples of non-combustible & fire resistant building materials for balconies, carports decks, patio covers and floors are as follow:

I. **NON-COMBUSTIBLE HEAVY GAGE ALUMINUM MATERIALS** - *Metals* *USA Building Products Group - Ultra-Lattice*



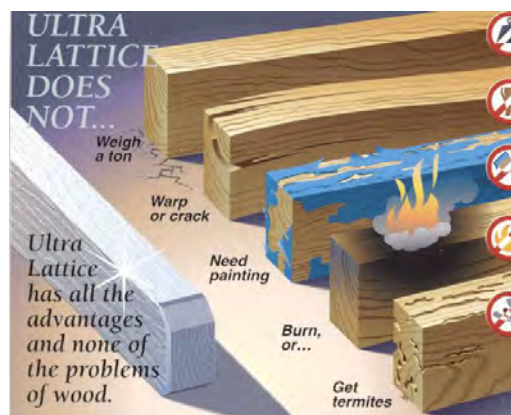
Ultra-Lattice Stand Alone Patio Cover



Ultra-Lattice Attached Patio Cover



Ultra-Lattice Solid Patio Cover



Ultra-Lattice Vs. Wood

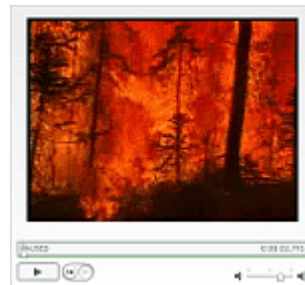
II. FRX Exterior Fire-Retardant Treated Wood

Exterior Fire Retardant Treated (FRT) Wood

FRX® fire retardant treated wood may be used in exterior applications permitted by the codes where: public safety is critical, other materials would transfer heat or allow fires to spread, sprinkler systems cannot easily be installed, corrosive atmospheres necessitate excessive maintenance of other materials, or fire protection is inadequate or not readily available. The International Building, Residential and Urban-Wildland Interface Codes and regulations permit the use of fire retardant treated wood in specific instances. See below for typical exterior uses and typical residential uses.

Typical Exterior Uses

- Balconies
- Decks



Homeowners
and
Residential
Architects:
See this 2-
minute video
and the
diagram
below.



For information on fire retardant treated wood for exterior uses, visit www.frxwood.com.

Decking (SFM Standard 12-7A-4)

III. TREX COMPANY, INC –“Trex Accents ®: Fire Defense™” wood and polyethylene composite deck board, nominal 5/4” thick x 5-1/2” width, nominal density of 0.036 lb/in³.

Trex Accents®: Fire Defense™

The perfect blend of beauty and brawn.

Trex's #1 selling platform, Trex Accents®, exceeds the strict fire regulations set by the State of California and San Diego County.



- Offers superior safety performance:
 - Exceeds ASTM E84 Class B Flame Spread.
 - Exceeds 12-7A-4 Part A (underflame) and Part B (Burning Brand).
- Self-extinguishing even under extreme fire exposure.
- Approved for use by the California State Fire Marshal's Office and San Diego County. Read the California Department of Forestry and Fire Protection, Office of the State Fire Marshal [WILDLAND URBAN INTERFACE \(WUI\) PRODUCTS Report](#). (PDF)

IV. SOLID “WOOD” DECKING

◆Company Name: Various Manufacturers

Product Description: Solid “Wood” decking: “Redwood”, “Western Red Cedar”, “Incense Cedar”, “Port Orford Cedar”, and “Alaska Yellow Cedar”.

Sizes: Minimum nominal 2” thickness (American Softwood Lumber Standard PS 20).

Lumber grades: Construction Common and better grades for Redwood, 3 Common and better grades for Cedars, and commercial decking or better grades for both Redwood and Cedars.

Special instructions: Solid wood decking shall be 3x decking and installed over solid wood joists spacing 24” or less on center with 6x6 columns, 4x10 or 6x8 beams and 4x8 joists.

APPENDIX ‘E’

Water and Fire Service Availability Forms



COUNTY OF SAN DIEGO
DEPT. OF PLANNING & LAND USE
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123-1666
(658) 565-5981 • (658) 267-8770

PROJECT FACILITY AVAILABILITY FORM

WATER

Please type or use pen

Starwood Santa Fe Valley (858) 756-6300

Owner's Name Phone

P.O. Box 2504

Owner's Mailing Address Street

Rancho Santa Fe, CA 92067

City State Zip

ORG _____

ACCT _____

ACT _____

TASK _____

DATE _____

AMT \$ _____

DISTRICT CASHIER'S USE ONLY

W

SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

- A. ☒ Major Subdivision (TM) ☐ Specific Plan or Specific Plan Amendment
☐ Minor Subdivision (TPM) ☐ Certificate of Compliance: _____
☐ Boundary Adjustment
☐ Rezone (Reclassification) from _____ to _____ zone.
☐ Major Use Permit (MUP), purpose: _____
☐ Time Extension... Case No. _____
☐ Expired Map... Case No. _____
☐ Other _____

Assessor's Parcel Number(s)
(Add extra if necessary)

2	6	7
2	6	7

1	4	7
1	4	7

0	1
0	2

- B. ☒ Residential Total number of dwelling units 8
☐ Commercial Gross floor area _____
☐ Industrial Gross floor area _____
☐ Other Gross floor area _____

Thomas Bros. Page 1168 Grid J 3

Artesian Road

Project address Street

San Dieguito Community Plan 92127

Community Planning Area/Subregion Zip

- C. ☒ Total Project acreage 20.3 Total number of lots 10 (2 pvt st lots)
D. Is the project proposing the use of groundwater? ☐ Yes ☒ No
Is the project proposing the use of reclaimed water? ☐ Yes ☒ No

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and
COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: Noel Humphrey Date: 8.20.08

Address: P.O. Box 2504 Rancho Santa Fe, CA 92067 Phone: (858) 756-6300

(On completion of above, present to the district that provides water protection to complete Section 2 below.)

SECTION 2: FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

District Name: Olivenhain MWD Service area Zone D-18

- A. ☒ Project is in the district.
☐ Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
☐ Project is not in the district and is not within its Sphere of Influence boundary.
☐ The project is not located entirely within the district and a potential boundary issue exists with the _____ District.
- B. ☒ Facilities to serve the project ☒ ARE ☐ ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached _____ (Number of sheets)
☐ Project will not be served for the following reason(s): _____
- C. ☒ District conditions are attached. Number of sheets attached: 4 sheets
☐ District has specific water reclamation conditions which are attached. Number of sheets attached: _____
☐ District will submit conditions at a later date.
- D. ☒ How far will the pipeline(s) have to be extended to serve the project? to be determined

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized signature: Karen Gaudin Print name Karen Gaudin

Print title Engineering Project Supervisor Phone 760-632-4642 Date 02 Sept 2008

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT
On completion of Section 2 by the district, applicant is to submit this form with application to:
Zoning Counter, Department of Planning and Land Use, 5201 Ruffin Road, San Diego, CA 92123

DPLU-399W (02/07)

Board of Directors

Susan J. Varty, *President*
Robert F. Topolovac, *Vice President*
Mark A. Muir, *Treasurer*
Jacob J. Krauss, *Secretary*
Ed K. Sprague, *Director*



General Manager
Kimberly A. Thorne

General Counsel
Wesley Peltzer

1966 Olivenhain Road, Encinitas, California 92024 | Phone (760) 753-6466 | Fax (760) 753-1578 | www.omwd.com

September 2, 2008

County of San Diego
DEPT. OF PLANNING & LAND USE
5201 Ruffin Road, Suite B3
San Diego, CA, 92123

Re: Tax Assessors Parcel # 267-147-01 and -02

Subject: Water Availability Letter / Starwood Santa Fe Valley
Supplement to County Form 399W

The fee owner, Starwood Santa Fe Valley (Applicant), has requested the District to provide a Water Availability Letter for the property identified above for a proposed project Applicant described as: Major Single Family Residential Subdivision. This property is in the District and eligible to receive domestic service at this time.

The District has or will have adequate facilities in this area to serve the project. While there is adequate water to serve the project at this time, all water received by the District is imported from other agencies. Accordingly, there is no guarantee that water will be available to serve the project when water is requested. The availability of water depends upon a number of complex factors including annual rainfall, drought periods, the amount of water remaining in storage and environmental and other constraints to the delivery of water. No final decision will be made by the District on the ability to serve water to the project until an application for water service is made by the applicant and approved by the District. At that time, the District will determine whether adequate water is available to serve the project in the District's sole discretion.

Both Water Code §350 and Water Code §71640 grant the District the right to restrict the use of water during any emergency caused by a drought or any other threatened or existing water shortage and to prohibit the use of District water during such periods as the District determines to be necessary. The District may also prohibit the use of District water during any periods for specific uses which it finds to be nonessential. Nothing contained in this water availability letter shall be construed as limiting in any way the legislative discretion of the District to declare an emergency or water shortage and to curtail or prohibit the use of water as determined necessary or appropriate by the District to conserve water during droughts or other threatened or existing water

shortages. Certain stages of water shortages may result in a prohibition on new water meters.

The District has been requested to furnish a staff estimate, based on current water service conditions, of the availability of water service in this area. This letter is issued for planning purposes and is not a representation, express or implied, that the District will provide any water service at a future date. Commitments to provide water service are made only when an application for water service is made by the applicant and approved by the District and are subject to the applicants compliance with the Districts' fees, charges, rules and regulations, the Environmental Quality Act of 1970, as amended, and the applicants' agreement to construct any required onsite and off site facilities together with the Applicant's providing security as required by the District for construction of those facilities.

The issuance of this Water Availability Letter does not grant the Applicant any water rights. The Applicant does not secure a right to water until application for service is made and approved by the District in its sole discretion, and the Applicant has complied with all requirements of the District.

The failure of the Applicant to pay any fee or charge of the District's when due, or to comply with other requirements of the District, shall entitle the District to unilaterally terminate this Water Availability Letter, and all further rights of the Applicant to water service.

Improvement fees, when applicable, are paid to the District to reserve future water service for the project contingent upon the Applicant paying all fees and charges and complying with all requirements of the District. The payment of all improvement fees by the date they are due is an express condition precedent to any right of the Applicant to receive future water service. The failure of Applicant to make any improvement fee payment by the date it is due shall automatically terminate the right of Applicant to receive future water service and no previous improvement fee payments paid by the Applicant shall be refunded. Reinstatement of the water commitment requires Applicant to remedy any defects or deficiencies and payment of fees and charges applicable, as determined by the District, in its sole discretion.

This commitment to water service availability is conditioned on the following requirements and/or limitations:

1. The District's determination that adequate water is available to serve the project at the time the applicant submits a request for water service to the District.
2. Payment of all improvements fees, as appropriate, when due in accordance with District Ordinance 301, or successor Ordinance, not attached hereto, but incorporated herein by reference.
3. Applicant is required to have a hydraulic analysis done by the District's consulting engineer to ascertain the impact of the project on the District's water system.

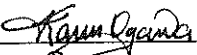
4. Applicant is required to provide all fee parcels and easements as required for construction of onsite and offsite facilities as required by the District, in its sole discretion.
5. Applicant is required to construct all onsite and offsite facilities as required by the District, in its sole discretion, including, but not limited to, an 8-inch pipeline connecting Top of the Morning Way in The Crosby at Rancho Santa Fe development to Artesian Road.
6. Applicant is required to execute District Agreement for pipeline construction and furnish all necessary documents for insurance, bonding, and pay all District's charges as they are invoiced.
7. In accordance with District Assessment District 96-01, not attached hereto, but incorporated herein by reference, lots of $\frac{1}{2}$ acre or less may have a $\frac{3}{4}$ inch meter installed unless owner chooses to upgrade the meter and pay the additional fees and charges. Lots greater than $\frac{1}{2}$ acre but less than 3 acres require one-inch meters to be installed. Lots in excess of 3 acres require a minimum $1\frac{1}{2}$ inch meter to be installed. Larger meters may be required by the District, in its sole discretion.

If it can be demonstrated that lots of a given area are not useable in gross, a deviation in meter size may be made with the concurrence of the District Engineering Manager.
8. The District may require larger meters than the Assessment District 96-01 lot size criteria would dictate if the individual residence requires water service greater than can be accommodated by the standard $\frac{3}{4}$ inch meter irrespective of the lot size, in its sole discretion.
9. Applicant is required to comply with District Ordinance 280 for the mitigation of impacts to the District's Assessment District 96-1. Ordinance 280 requires an executed agreement to request increased EDU's that this project requires. The Applicant is responsible for payment of all fees and charges as outlined in the executed agreement.
10. The District has not declared a water shortage that restricts water usage or prohibits new water meters.

This letter of water availability pertains solely to the proposed project as described by Applicant, is not transferable to any other project, and is not transferable to any other owner or developer without written permission of the Board of Directors of the District. Any purported transfer, sale, or assignment of this Water Availability Letter without the prior written consent of the District renders this letter null and void.

This letter automatically terminates, and is of no further force or effect, on the occurrence of: (1) September 2, 2009 without an approved tentative map; (2) termination of any tentative map; (3) termination of any final map; or (4) five years from the date of recordation of any final map.

OLIVENHAIN MUNICIPAL WATER DISTRICT

By: 
Karen Ogawa
Engineering Project Supervisor



COUNTY OF SAN DIEGO
DEPT. OF PLANNING & LAND USE
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123-1666

(659) 565-5981 • (659) 267-8770

PROJECT FACILITY AVAILABILITY FORM

FIRE

Please type or use pen

Starwood Santa Fe Valley (858) 756-6300

Owner's Name Phone

P.O. Box 2504

Owner's Mailing Address Street

Rancho Santa Fe, CA 92067

City State Zip

ORG _____

ACCT _____

ACT _____

TASK _____

DATE _____ AMT \$ _____

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

- A. ☒ Major Subdivision (TM) ☐ Specific Plan or Specific Plan Amendment
☐ Minor Subdivision (TPM) ☐ Certificate of Compliance: _____
☐ Boundary Adjustment
☐ Rezone (Reclassification) from _____ to _____ zone.
☐ Major Use Permit (MUP), purpose: _____
☐ Time Extension... Case No. _____
☐ Expired Map... Case No. _____
☐ Other _____

Assessor's Parcel Number(s)
(Add extra if necessary)

2	6	7	1	4	7	0	1
2	6	7	1	4	7	0	2

- B. ☒ Residential Total number of dwelling units 8
☐ Commercial Gross floor area _____
☐ Industrial Gross floor area _____
☐ Other Gross floor area _____

Thomas Bros. Page 1168 Grid J 3
Artesian Road

- C. Total Project acreage 20.3 Total lots 10 Smallest proposed lot 2.03

Project address Street
San Dieguito 92127
Community Planning Area/Subregion Zip

OWNER/APPLICANT AGREES TO COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: Noel Humphrey Date: 8-20-08
Address: P.O. Box 2504 Rancho Santa Fe, CA 92067 Phone: (858) 756-6300
(On completion of above, present to the district that provides fire protection to complete Section 2 and 3 below.)

SECTION 2: FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

District name Rancho Santa Fe Fire Protection District
Indicate the location and distance of the primary fire station that will serve the proposed project: STA #4 LESS THAN 4 miles - 18040 CALLE AMBIENTE

- A. ☒ Project is in the District and eligible for service.
☐ Project is not in the District but is within its Sphere of Influence boundary, owner must apply for annexation.
☐ Project is not in the District and not within its Sphere of Influence boundary.
☐ Project is not located entirely within the District and a potential boundary issue exists with the _____ District.
B. ☒ Based on the capacity and capability of the District's existing and planned facilities, fire protection facilities are currently adequate or will be adequate to serve the proposed project. The expected emergency travel time to the proposed project is LESS THAN 7 minutes.
☐ Fire protection facilities are not expected to be adequate to serve the proposed development within the next five years.
C. ☒ District conditions are attached. Number of sheets attached: _____
☐ District will submit conditions at a later date.

SECTION 3. FUELBREAK REQUIREMENTS

Note: The fuelbreak requirements prescribed by the fire district for the proposed project do not authorize any clearing prior to project approval by the Department of Planning and Land Use.

- ☒ Within the proposed project 150 feet of clearing will be required around all structures.
☐ The proposed project is located in a hazardous wildland fire area, and additional fuelbreak requirements may apply. Environmental mitigation requirements should be coordinated with the fire district to ensure that these requirements will not pose fire hazards.

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized signature: [Signature] Print name and title: Clifford F. Hunter Phone: _____ Date: _____

On completion of Section 2 and 3 by the District, applicant is to submit this form with application to:
Zoning Counter, Department of Planning and Land Use, 5201 Ruffin Road, Suite B, San Diego, CA 92123



Rancho Santa Fe Fire Protection District

P.O. Box 410 • 16936 El Fuego • Rancho Santa Fe • California 92067-0410
Tel. (858) 756-5971 • Fax (858) 756-4799

Board of Directors
James Ashcraft, President
Clifford Douglas
Thomas Hickerson
Nancy Hillgren
Randall Malin

Fire Chief
Nicholas Pavone

August 27, 2008

COUNTY OF SAN DIEGO
Department of Planning and Land Use
5201 Ruffin Rd., Suite B
San Diego, CA 92123-1666

RE: Project Facility Availability - Starwood Development – 8 units Santa Fe Heights - Artesian Rd APN 267-147-01 and 267-147-02 – This letter expires in two years from the above date.

To Whom It May Concern,

The Rancho Santa Fe Fire Protection District has reviewed the above mentioned project. This parcel lies within an area that has been determined to be a Very High Fire Hazard area. As such, the project will be required to comply with Rancho Santa Fe Fire Protection District 2007 California Fire Code Ordinance 2008-02 As Amended & WUI 2008-01 Detail information regarding the Fire Districts Ordinances can be found on the Departments web site at: www.rsf-fire.org, under fire prevention.

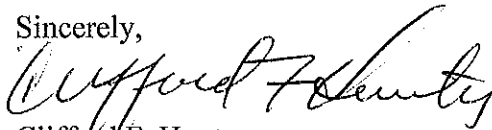
- 1. ACCESS/ROADWAYS:** Per the RSFFPD Ordinance 2008-02, Fire Apparatus Access Roads Specifications, the roadway(s) within this project shall conform to this section. The roadway serving this project shall have a minimum improved paved width of 24 feet. Maximum grade is 20 %. **All dead end roads shall provide a minimum unobstructed paved radius width for a cul-de-sac which shall be 36 feet radius in residential areas (or other approved turnaround).** Any other roadway features, such as cul-de-sacs, turn-outs, gates, etc. must meet the design criteria of the Fire District. All fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches. **No Parking signs required on streets when less than 30 feet wide.** Fire lanes may be required. Fire apparatus access roads, including private residential driveways, shall be required for every building hereafter constructed when any portion of an exterior wall of the first story is located more than 150 feet from the closest point of fire department vehicle access. **Secondary/Emergency access is required when you exceed 1320 feet from Artesian Road.** The first layment of asphalt must be in place and serviceable prior to the delivery of combustible construction materials to the site. **Artesian Rd may be required to be improved/widened based on access to project.**
- 2. HYDRANTS:** Fire hydrants, together with an adequate water supply, must be installed at locations acceptable to the Fire District, and be within **500' to all parts of a building.** The required fire flow for this project is **2500 gallons per minute at 20-psi residual**

pressure. Specific hydrant location to be determined with a separate submittal. Fire Hydrants shall be in place and serviceable prior to the delivery of combustible construction materials to the site.

3. **Automatic fire sprinklers** shall be installed in all occupancies.
4. **Landscape plan shall be submitted** to the Fire District. Submittal shall comply with criteria identified in Ordinance #2008-01 and 2008-01. A 100' fuel modification zones shall be required in areas that are located near or next to open space areas. Roadways require a 30' fuel modification zone on each side of the roadway. Structures shall have a setback from top of slope of 15' for single story elements, and 30' for two-story elements.
5. Use of **building materials** shall comply with enhanced construction and Ordinance 2008-01 WUI and Ordinance #2008-02.
6. A fire Protection plan is required as prescribed in the county of San Diego Land Use and Environment Group. "Guidelines for Determining Significance and report format and content requirements for Wildland Fire and Fire Protection" document.

Questions or concerns regarding the above comments should be directed to me. Thank you.

Sincerely,



Clifford F. Hunter

Fire Marshal

Rancho Santa Fe Fire Protection District

File

APPENDIX ‘F’

LITERATURE REFERENCED

Literature Referenced

Santa Fe Heights Fire Protection Plan Rancho Santa Fe Fire Protection District

1. BEHAVE: Fire Behavior Prediction and Fuel Modeling System - BURN Subsystem, Part 1. General Technical Report INT-194. January 1986. Patricia L. Andrews, United States Department of Agriculture - Forest Service, Intermountain Station, Ogden, Utah 84401.
2. BEHAVE: Fire Behavior Prediction and Fuel Modeling System - BURN Subsystem, Part 2. General Technical Report INT-260. May 1989. Patricia L. Andrews and Carolyn H. Chase, United States Department of Agriculture - Forest Service, Intermountain Station, Ogden, Utah 84401.
3. BehavePlus Fire Modeling System, Version 2.0 General Technical Report RMRS-GRT-106WWW. June 2003. Patricia L. Andrews, Collin D. Bevins & Robert C. Seli. United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.
4. County of San Diego Ordinance No. 9915 – An Ordinance Amending of the County Fire Code Relating to Wildland/Urban Interface Standards.
5. How to Predict the Spread and Intensity of Forest and Range Fires. General Technical Report INT-143. June 1983. Richard C. Rothermel. United States Department of Agriculture - Forest Service, Intermountain Station, Ogden, Utah 84401.
6. Rancho Santa Fe Fire Protection District Ordinance 2011-01, which adopts the International Wildland-Urban Interface Code, 2006 Edition and Adopting Appendix "A" and "D" with Certain Amendments, Additions, and Deletions.
7. *Expectations for Wildland Fire Protection Plans (Including Fuel Management Plans and Fire Behavior Modeling).* FPO RSF 2-16-2006, Rancho Santa Fe Fire Protection District.
8. Amendments to the County Building, Electrical, Plumbing, and Mechanical Codes and the County Fire Code, January 30, 2008.
9. 2007 California Building Code, Chapter 7A, *Materials and Construction Methods for Exterior Wildfire Exposure (SFM)*
10. *Biological Resources and Wetland Survey Report-Mellon Administrative Clearing Permit.* Everett and Associates Environmental Consultants, La Jolla, CA 92038
11. California Fire Code, 2010 Edition

APPENDIX 'G'

SECONDARY ACCESS APPROVAL LETTER AND EASEMENTS



Rancho Santa Fe Fire Protection District

P.O. Box 410 • 16936 El Fuego • Rancho Santa Fe • California 92067-0410
Tel. (858) 756-5971 • Fax (858) 756-4799

Board of Directors
James Ashcraft, **President**
Thomas Hickerson
Nancy C. Hillgren
Randall Malin
John C. Tanner

Fire Chief
Nicholas G. Pavone

December 15, 2010

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road STE B
San Diego, CA 92123

Reference: TM 5556 Secondary access Caminito de las Palmas (Red Brick Road Surface)

To whom it may Concern,

I made a site visit to Caminito de las Palmas to inspect the road condition for surface (Red Brick road Surface), width and vertical clearance. The width is approximately 20 feet and the tree lining the road has been maintained to provide the proper vertical clearance. The roadway is currently gated at Caminito de las Palmas, and Artesian Road (Strobe and Key switched operated for emergency operation) additionally, this gate has a loop for exiting Caminito de las Palmas to Artesian Road. The gate located in the Crosby also has a Strobe and Key switched operated for emergency operation.

Caminito de las Palmas is also used for an emergency access from the Crosby to Artesian Road (Reference Project TM5073-8 – Mike Flynn). The current road had roadway modification made sometime in October/ November in 1996. As such, the requirement for additional secondary access is adequate from the Crosby to Artesian Road or from Artesian Road to the Crosby this access roadway will be adequate to also serve TM 5556 project.

If you have any further questions please feel free to contact me at 858-756-6040

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Clifford F. Hunter".

Clifford F. Hunter
Fire Marshal
Rancho Santa Fe Fire Protection District

c. File



RECORDING REQUESTED BY
FIRST AMERICAN TITLE

Return To:

TOR Investments L.P.
1000 Pioneer Way
El Cajon, CA 92020
Attn: Jeff Hamann

NOV 24, 2010 8:00 AM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
DAVID L. BUTLER, COUNTY RECORDER

FEES: 37.00
OC: OC TAX: N.D.

9709 PAGES: 5



GRANT DEED *DTT: Non Disclosure*

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
STARWOOD-SANTA FE VALLEY PARTNERS, a California general partnership ("Grantor"),
hereby grants to TOR INVESTMENTS L.P., a California limited partnership ("Grantee"), the
following real property located in the County of San Diego, State of California:

PARCEL A: (APN: 267-147-01) (Santa Fe Heights)

WEST HALF OF WEST HALF OF THE NORTHWEST QUARTER OF THE
NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 13 SOUTH, RANGE 3
WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO,
STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT
SURVEY THEREOF.

PARCEL B: (APN: 267-147-02)

THE EAST HALF OF THE WEST HALF OF THE NORTHWEST QUARTER OF THE
NORTHEAST QUARTER OF SECTION 26, TOWNSHIP 13 SOUTH, RANGE 3
WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO,
STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT
SURVEY THEREOF.

PARCEL C:

AN EASEMENT FOR ROAD PURPOSES, AND INCIDENTAL PURPOSES, 60 FEET
IN WIDTH, THE CENTER LINE OF WHICH IS THE EAST AND WEST CENTER
LINE OF THE NORTH HALF OF SECTION 26, TOWNSHIP 13 SOUTH, RANGE 3
WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO,
STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT
SURVEY THEREOF.

EXCEPTING THEREFROM THAT PORTION LYING WITHIN PARCELS A AND B
HEREINABOVE DESCRIBED.

PARCEL D:

NON-EXCLUSIVE EASEMENTS, APPURTENANT TO PARCELS A AND B, FOR
EMERGENCY ACCESS OVER LOTS 282, 283 AND 284 (STREET LOTS) OF TRACT 5073-

5 AS SHOWN ON MAP THEREOF NO. 14351 RECORDED ON MARCH 6, 2002; LOT 256 (STREET LOT), OF TRACT 5073-4 AS SHOWN ON MAP THEREOF NO. 14199 RECORDED ON APRIL 26, 2001 AND LOT 125 (STREET LOT), OF TRACT 5073-2 AS SHOWN ON MAP THEREOF NO. 14107 RECORDED ON DECEMBER 13, 2000, AND LOT 338 (STREET LOT), OF TRACT ~~5073-7~~ AS SHOWN ON MAP THEREOF NO. ~~14457~~ 14557 RECORDED ON MARCH 14, 2003, ALL IN THE OFFICE OF THE SAN DIEGO COUNTY RECORDER. IN ADDITION, GRANTOR ASSIGNS TO GRANTEE, WITH RESPECT TO GRANTEE'S OWNERSHIP OF PARCELS A AND B, THE EASEMENTS OF ACCESS, INGRESS AND EGRESS OVER THE BRIDGE OVERPASS DESCRIBED IN SECTION (B) OF THE GRANT DEED FROM GRANTOR TO THE COUNTY OF SAN DIEGO RECORDED ON NOVEMBER 15, 2000 AS INSTRUMENT NO. 2000-0622019 OF OFFICIAL RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

EXCEPTING AND RESERVING UNTO GRANTOR, its successors and assigns together with the right (without the consent of Grantee or any other owner of an interest in the Property) to grant and transfer all or a portion of the same, as follows:

A. Any and all oil, oil rights, minerals, mineral rights, natural gas rights and other hydrocarbons by whatsoever name known, geothermal steam and other material resources and all products derived from any of the foregoing, that may be within or under the Property, together with the perpetual right of drilling, mining, exploring and operating therefor and storing in and removing the same from the Property or any other land, including the right to whipstock or directionally drill and mine from lands other than those conveyed hereby, oil or gas wells, tunnels and shafts into, through or across the subsurface of the Property, and to bottom such whipstocked or directionally drilled wells, tunnels and shafts under and beneath or beyond the exterior limits thereof, and to redrill, retunnel, equip, maintain, repair, deepen and operate any such wells or mines without, however, the right to drill, mine, store, explore and operate on, in or through the surface or the upper five hundred (500) feet of the subsurface of the Property.

B. Any and all water, water rights or interests therein appurtenant or relating to the Property or owned or used by Grantor in connection with or with respect to the Property (no matter how acquired by Grantor), whether such water, water rights or interests therein shall be riparian, overlying, appropriative, littoral, percolating, prescriptive, adjudicated, statutory or contractual, together with the right and power to explore, drill, redrill, remove and store the same from or in the Property or to divert or otherwise utilize such water, water rights or interests therein on any other property owned or leased by Grantor; but without, however any right to enter upon the surface of the Property in the exercise of such rights.

C. Non-exclusive easements in gross, for the purpose of the construction, installation (including the right to connect to existing facilities), repair, replacement, maintenance and use of underground conduit containing, now or in the future, telephone, television, telecommunication, antenna, cable and other communication or transmission systems of any type or nature and related facilities (which related facilities may be located above ground to the extent reasonably necessary), on, over and under: (a) all private and public streets and roadways (including any lots shown as a street or roadway on a final subdivision map or parcel map covering the Property and any street or roadway right-of-way conveyed or dedicated in fee or by easement to any governmental agency), trails and walkways in the Property; (b) all parkways adjacent to any such

streets or roadways; (c) all lettered lots shown on a final subdivision map or parcel map covering the Property; and (d) all other portions of the Property not improved, from time to time, with a residential structure or other building, together with the ownership of such conduit and systems from time to time contained therein and all related facilities; provided, however, the construction, installation, repair, replacement or maintenance of such facilities shall not unreasonably interfere with the reasonable use or development of the Property.

D. The right to place on, under or across the Property, transmission lines and other facilities for a community antenna television and/or communication system and thereafter to own and convey such lines and facilities, and the right to enter upon the Property to service, maintain, repair, reconstruct and replace said lines and facilities; provided, however, that the exercise of such rights shall not unreasonably interfere with Grantee's reasonable use or development of the Property.

E. Nonexclusive easements in gross on, over and under the Property for the construction, installation, repair, replacement and maintenance of electric, gas, telephone, water, sewer and drainage facilities, provided that the construction and installation of such facilities shall not unreasonably interfere with Grantee's reasonable use or development of the Property.

F. Nonexclusive easements in gross on, over and under the Property for construction, equipment storage rights-of-way and for the following purposes: (i) construction and installation of improvements funded by or through assessment and/or improvement districts; provided that the use of the Property pursuant to the above shall not unreasonably interfere with Grantee's reasonable use or development of the Property. With the exception of utility and communications easements that are conveyed to the appropriate utility service, the easements identified in (C) through (F) inclusive, above, shall automatically terminate and be of no further force or effect as to any portion of the Property upon the conveyance thereof to a buyer or other transferee who is entitled to receive by reason of such conveyance a subdivision public report pursuant to California Business and Professions Code Section 11018.2 or any similar statute hereafter in effect or upon conveyance to an association whose members consist in whole or in part of such buyers or other transferees ("Association").

G. For the sole purpose of, and only to the extent provided in, the Master CC&Rs (as defined below), Grantor reserves for the benefit of the Association, permanent, nonexclusive easements in gross on, over and under the Property for the construction, installation, repair, replacement and maintenance of landscaping, monuments, walls and related improvements, provided that the use of the Property pursuant hereto shall not unreasonably interfere with Grantee's reasonable use or development of the Property.

H. Permanent, nonexclusive easements in gross on, over and under all private and public streets, roads and walkways in the Property for the purpose of (i) vehicular and pedestrian ingress and egress to all portions of the adjacent property owned by Grantor or its successors ("Adjacent Property") and (ii) the construction, installation (including the right to connect to existing facilities), maintenance and use of electric, gas, cable, telephone, water, sewer, drainage and other utility facilities serving the Adjacent Property; provided, however, that the construction, installation and maintenance of such facilities shall not unreasonably interfere with Grantee's development or use of the Property.

SUBJECT TO:

1. General and special real property taxes and assessments and supplemental assessments, if any, for the current fiscal year.

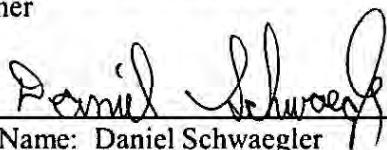
2. That certain Master Declaration of Covenants, Conditions and Restrictions for The Crosby Estate at Rancho Santa Fe, recorded November 27, 2000, as File No. 2000-0641853 in the Official Records, as amended and restated by that certain First Amended and Restated Master Declaration of Covenants, Conditions and Restrictions for The Crosby Estate at Rancho Santa Fe, recorded May 22, 2001, as File No. 2001-0325862 in the Official Records, as the same may be amended or restated ("Master CC&Rs") and any amendments thereto, and the covenants, conditions, restrictions, rights, reservations, benefits and burdens therein contained, each and all of which are hereby expressly incorporated herein by this reference.

3. All other covenants, conditions, restrictions, reservations, rights, rights-of-way, dedications, offers of dedication and easements of record.

IN WITNESS WHEREOF, Grantor has executed this Grant Deed on the day and year hereafter written.

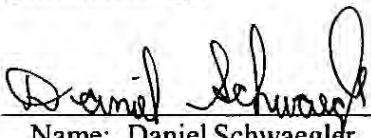
STARWOOD-SANTA FE VALLEY PARTNERS,
a California general partnership

By: SOFI-IV RANCHO SANTA FE, L.L.C.,
a Connecticut limited liability company, general
partner

By: 
Name: Daniel Schwaegler
Title: Vice President

By: SANTA FE VALLEY, LLC,
an Arizona limited liability company, general
partner

By: SOFI-IV RANCHO SANTA FE
MANAGER, L.L.C., a Delaware
limited liability company,
its general manager

By: 
Name: Daniel Schwaegler
Title: Vice President

CERTIFICATE OF ACKNOWLEDGMENT

9713

STATE OF CALIFORNIA)
COUNTY OF San Francisco)

On November 22, 2010, before me, Marlyn And, Notary Public,
personally appeared Daniel Schwager, who proved to me on the basis
of satisfactory evidence to be the person(s) whose name(s) ~~is/are~~ subscribed to the within
instrument and acknowledged to me that ~~he/she/they~~ executed the same in ~~his/her/their~~
authorized capacity(ies), and that by ~~his/her/their~~ signature(s) on the instrument the person(s), or
the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature *Marlyn And* (Seal)



Order No. accomm-6
Escrow
Loan No. First American Title
SUBDIVISION MAPPING DEPT.

WHEN RECORDED MAIL TO:

FIRST AMERICAN TITLE
411 IVY STREET
SAN DIEGO, CA. 92101
ATTN: DIANNE LIVINGSTON

*F6
3P
CCNA*

DOC # 2005-0415959



MAY 17, 2005 4:11 PM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 13.00
OC: NA
PAGES: 3



2005-0415959

Accom - 6

MAIL TAX STATEMENTS TO:

23051

SPACE ABOVE THIS LINE FOR RECORDER'S USE

DOCUMENTARY TRANSFER TAX \$

.....Computed on the consideration of value of property; OR

.....Computed on the consideration of value less liens or encumbrances remaining at time of sale.

SAME AS ABOVE

*to ELIMINATE
Easement ONLY*
Dianne Livingston - First Am. Title
Signature of Declarant or Agent determining tax - Firm Name

APN #
267-145-04

EASEMENT GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

LINDEN JAN FELLERMAN AND LUANN SCHWARTZ FELLERMAN

hereby GRANT(S) to

STARWOOD-SANTA FE VALLEY PARTNERS, a California general partnership and THE CROSBY ESTATE AT RANCHO SANTA FE MASTER ASSOCIATION, a California nonprofit corporation

the real property in the
County of SAN DIEGO

,State of California, described as

SEE EXHIBIT "A" ATTACHED HERETO AND INCORPORATED HEREIN BY THIS REFERENCE.

LINDEN JAN FELLERMAN

Luann Schwartz Fellerman
LUANN SCHWARTZ FELLERMAN

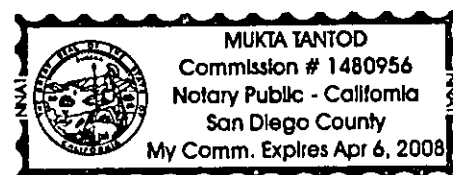
Dated APRIL 11, 2005

STATE OF CALIFORNIA } ss.
COUNTY OF San Diego }

On April 11 th 2005 before me,
Mukta Tantod

personally appeared
Luann Schwartz Fellerman
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.
WITNESS my hand and official seal.

Signature Mukta Tantod



This document is being recorded by
First American Title Insurance Co. as
an accommodation only. It has not
been examined as to execution or
impact on title.

MAIL TAX STATEMENTS AS DIRECTED ABOVE

Order No.
Escrow No.
Loan No.

Original

WHEN RECORDED MAIL TO:

23052

MAIL TAX STATEMENTS TO:

SPACE ABOVE THIS LINE FOR RECORDER'S USE

DOCUMENTARY TRANSFER TAX \$.....
.....Computed on the consideration of value of property; OR
.....Computed on the consideration of value less liens or encumbrances
remaining at time of sale.

SAME AS ABOVE

Signature of Declarant or Agent determining tax - Firm Name

APN #
267-145-04

EASEMENT GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

LINDEN JAN FELLERMAN AND LUANN SCHWARTZ FELLERMAN

hereby GRANT(S) to

STARWOOD-SANTA FE VALLEY PARTNERS, a California general partnership and THE CROSBY ESTATE AT RANCHO SANTA FE MASTER ASSOCIATION, a California nonprofit corporation

the real property in the
County of SAN DIEGO

,State of California, described as

SEE EXHIBIT "A" ATTACHED HERETO AND INCORPORATED HEREIN BY THIS REFERENCE.


LINDEN JAN FELLERMAN

Dated APRIL 11, 2005

LUANN SCHWARTZ FELLERMAN

STATE OF CALIFORNIA } ss.
COUNTY OF San Diego }

On April 11th, 2005 before me,
Karla Bare, Notary Public
personally appeared Linden Jan Fellerman

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official seal.

Signature Karla Bare



(This area for official notarial seal)

MAIL TAX STATEMENTS AS DIRECTED ABOVE

1002 (1/94)

EXHIBIT "A"

AN EASEMENT AND RIGHT OF WAY FOR EMERGENCY ACCESS ROAD PURPOSES OVER AND ACROSS THAT PORTION OF PARCELS 1 AND 2 OF PARCEL MAP NO. 12568, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, FEBRUARY 17, 1983 AS FILE NO. 83-052441 OF OFFICIAL RECORDS, AND PARCEL 4 OF PARCEL MAP NO. 16606, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 29, 1991 AS FILE NO. 91-0445099 OF OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

THE EASTERLY 20.00 FEET OF SAID PARCEL 2 OF PARCEL MAP NO. 12568.

TOGETHER WITH THE SOUTHERLY 73.00 FEET OF THE EASTERLY 32.00 FEET OF SAID PARCEL 1 OF PARCEL MAP NO. 12568.

TOGETHER WITH A PORTION OF SAID PARCEL 2 OF PARCEL MAP NO. 12568, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWESTERLY CORNER OF THE SOUTHERLY 30.00 FEET OF THE EASTERLY 20.00 FEET OF SAID PARCEL 2; THENCE ALONG THE WESTERLY LINE OF SAID EASTERLY 20.00 FEET OF PARCEL 2 NORTH 1°20'08" EAST, 418.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING NORTH 1°20'08" EAST, ALONG SAID WESTERLY LINE, TO THE NORTHERLY LINE OF SAID PARCEL 2; THENCE WESTERLY ALONG SAID NORTHERLY LINE 12.00 FEET; THENCE LEAVING SAID NORTHERLY LINE IN A SOUTHERLY DIRECTION TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH THAT PORTION OF AFORESAID PARCEL MAP NO. 16606 DELINEATED AND DESIGNATED THEREON AS "PROPOSED PRIVATE ROAD EASEMENT".

TOGETHER WITH THAT PORTION OF SAID PARCEL 1 OF PARCEL MAP NO. 12568, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHERLY 73.00 FEET OF THE EASTERLY 32.00 FEET OF SAID PARCEL 1 OF PARCEL MAP NO. 12568; THENCE NORTH 6°11'57" WEST 70.34 FEET; THENCE NORTH 78°18'11" EAST 21.38 FEET; THENCE SOUTH 6°11'57" EAST, 74.96 FEET TO THE NORTHERLY LINE OF AFORESAID SOUTHERLY 73.00 FEET OF THE EASTERLY 32.00 FEET OF PARCEL 1 OF PARCEL MAP NO. 12568; THENCE WESTERLY ALONG SAID NORTHERLY LINE TO THE POINT OF BEGINNING.

County Of San Diego Tract TM 5556

FIRE PROTECTION PLAN EXHIBIT



60 MPH NE Wind				
SCAL 18 - Coastal Sage Scrub				
Flame Length				
43.8 Feet				

FUEL TREATMENT LOCATION
For
Santa Fe Heights Project
SAN DIEGO COUNTY, CALIFORNIA

IRRIGATED ZONE 1 (LOT OWNER MAINTAINED) - The area within 50 feet of any structure greater than 250 square feet shall be maintained to irrigated Zone 1 criteria. A permanent irrigation system shall be installed and maintained within this zone. Only plants from the approved San Diego County plant list are to be installed. All combustible building materials including combustible decks, patio covers and gazebos will be prohibited in this zone. See Fire Protection Plan for details.

THINNING ZONE 2 (LOT OWNER MAINTAINED) - Zone 2 begins at the outer edge of Zone 1 and extends for a distance of 50 feet or to the property line. It is a non-irrigated thinning zone and includes all natural and manufactured slopes. All exotic and flammable native plants shall be removed with the original canopy and fuel loading reduced to 50%. Maintenance will be on-going throughout the year as needed with continuous removal and/or thinning of undesirable combustible vegetation to maintain 50% thinning, and limbing and shaping, of the retained fire resistant native plants. Native annual and perennial grasses will be allowed to grow and produce seed during the winter and spring. As grasses begin to cure (dry out), they will be cut to 4 inches or less in height. See Fire Protection Plan for details.

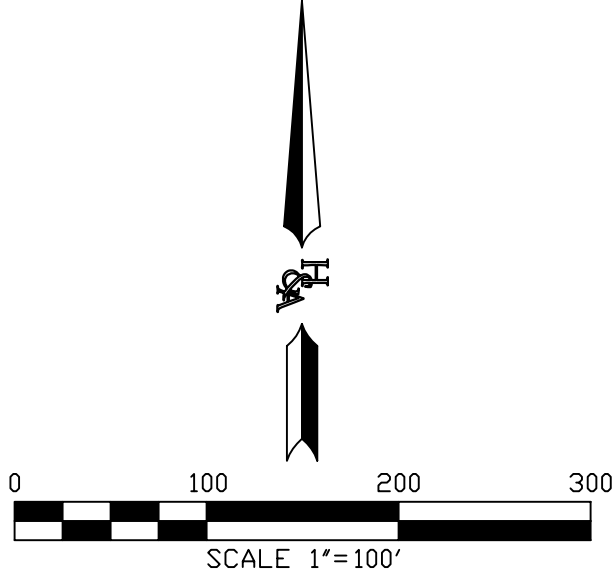
ROADWAY CLEARANCE (LOT OWNER MAINTAINED) - An area twenty (20) feet in width along each side of private roads and thirty (30) feet along each side of public roads shall be cleared of flammable vegetative growth and maintained at a minimum to Zone 2 criteria.

Prepared For: Noel Humphrey
Starwood-Santa Fe Valley Partners
P.O.Box 2504, Rancho Santa Fe, CA 92067

Firewise 2000, Inc.
26337 Sky Drive • Escondido, CA • 92026 • Telephone: 760-745-3947

30 MPH SW Wind				
SCAL 18 - Coastal Sage Scrub				
Flame Length				
32.7 Feet				

Certified By	
David C. Bacon, President	Date
FIRE WISE 2000, Inc. 26337 Sky Drive Escondido, CA 92026 Telephone: 760-745-3947 E-Mail: firewise2000@sbcglobal.net	



PREPARED BY:

H&A

HUNSAKER & ASSOCIATES
SAN DIEGO, INC.

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ENGINEERING San Diego, CA 92121
SURVEYING PH(619)558-4500 FX(619)558-1414

FIRE PROTECTION PLAN EXHIBIT
COUNTY OF SAN DIEGO TRACT TM 5556
SANTA FE HEIGHTS
COUNTY OF SAN DIEGO, CALIFORNIA

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